

# BMJ Open

BMJ Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or pay-per-view fees (<http://bmjopen.bmj.com>).

If you have any questions on BMJ Open's open peer review process please email [info.bmjopen@bmj.com](mailto:info.bmjopen@bmj.com)

# BMJ Open

## Air pollutants and development of interstitial lung disease in patients with connective tissue disease: a population-based study

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2020-041405
Article Type:	Original research
Date Submitted by the Author:	08-Jun-2020
Complete List of Authors:	Chen, Hsin-Hua; Taichung Veterans General Hospital, Division of Allergy, Immunology and Rheumatology Yong, You-Ming; National Chung Hsing University, Department of Management Information Systems Lin, Ching-Heng ; Taichung Veterans General Hospital, Department of Medical Research Chen, Yi-Hsing; Taichung Veterans General Hospital, Division of Allergy, Immunology and Rheumatology Chen, Der-Yuan; China Medical University Hospital, Rheumatology and Immunology Center Ying, Jia-Ching; National Chung Hsing University, Department of Management Information Systems Chao, Wen-Cheng; Taichung Veterans General Hospital, Department of Medical Research
Keywords:	EPIDEMIOLOGY, Rheumatology < INTERNAL MEDICINE, Thoracic medicine < INTERNAL MEDICINE

SCHOLARONE™  
Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our [licence](#).

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which [Creative Commons](#) licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

1 **Air pollutants and development of interstitial lung disease in patients**  
2 **with connective tissue disease: a population-based study**

3  
4  
5  
6  
7  
8  
9  
10  
11 Hsin-Hua Chen<sup>1,2,3,4,5,6,7</sup>, You-Ming Yong<sup>8</sup>, Ching-Heng Lin<sup>1,9,10</sup>, Yi-Hsing Chen<sup>2,3</sup>,  
12  
13 Der-Yuan Chen<sup>11,12,13</sup>, Jia-Ching Ying<sup>8\*</sup>, Wen-Cheng Chao<sup>14,15\*</sup>

14  
15  
16 <sup>1</sup>Department of Medical Research, Taichung Veterans General Hospital, Taichung,  
17  
18 Taiwan

19  
20 <sup>2</sup>Division of Allergy, Immunology and Rheumatology, Department of Internal  
21  
22 Medicine, Taichung Veterans General Hospital, Taichung, Taiwan.

23  
24  
25 <sup>3</sup>School of Medicine, National Yang-Ming University, Taipei, Taiwan

26  
27 <sup>4</sup>Institute of Biomedical Science and Rong Hsing Research Center for Translational  
28  
29 Medicine, Chung Hsing University, Taichung, Taiwan

30  
31  
32 <sup>5</sup>Institute of Public Health and Community Medicine Research Center, National Yang  
33  
34 Ming University, Taipei, Taiwan

35  
36  
37 <sup>6</sup>Department of Industrial Engineering and Enterprise Information, Tunghai  
38  
39 University, Taichung, Taiwan

40  
41  
42 <sup>7</sup>Institute of Medicine, Chung Shan Medical University, Taichung, Taiwan.

43  
44  
45 <sup>8</sup>Department of Management Information Systems, National Chung Hsing University,  
46  
47 Taichung, Taiwan

48  
49  
50 <sup>9</sup>Department of Healthcare Management, National Taipei University of Nursing and  
51  
52 Health Sciences, Taipei, Taiwan

53  
54  
55 <sup>10</sup>Department of Public Health, College of Medicine, Fu Jen Catholic University, New  
56  
57 Taipei City, Taiwan

58  
59  
60 <sup>11</sup>Rheumatology and Immunology Center, China Medical University Hospital,  
Taichung, Taiwan

1  
2 26 <sup>12</sup>Translational Medicine Laboratory, Rheumatic Diseases Research Center, China  
3

4 27 Medical University Hospital, Taichung, Taiwan  
5

6 28 <sup>13</sup>School of Medicine, China Medical University, Taichung, Taiwan  
7

8 29 <sup>14</sup>Department of Critical Care Medicine, Taichung Veterans General Hospital,  
9

10  
11 30 Taichung, Taiwan  
12

13 31 <sup>15</sup>Department of Computer Science, Tunghai University, Taichung, Taiwan  
14

15 32 \*Correspondence and requests for materials should be addressed to Dr Jia-Ching Ying  
16

17  
18 33 and Dr Wen-Cheng Chao  
19

20 34 E-mail: [jcying@nchu.edu.tw](mailto:jcying@nchu.edu.tw) and [cwc081@hotmail.com](mailto:cwc081@hotmail.com)  
21  
22

23 35 **Running title: Air pollutants and CTD-ILD**  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 **37 Abstract**  
4

5  
6 **38 Objective:**  
7

8  
9 39 The aim of this study was to assess the association between air pollutant exposure and  
10  
11 40 interstitial lung disease (ILD) in patients with connective tissue diseases (CTDs).  
12  
13

14  
15 **41 Setting:**  
16

17  
18 42 A nationwide, population-based, matched case-control study in Taiwan  
19

20  
21 **43 Participants:**  
22

23  
24 44 Using the 1997–2013 Taiwanese National Health Insurance Research Database, we  
25  
26 45 identified patients with newly diagnosed CTD during 2001–2013, including systemic  
27  
28 46 lupus erythematosus (SLE), rheumatoid arthritis (RA), systemic sclerosis (SSc),  
29  
30 47 dermatomyositis (DMtis)/polymyositis (PM) and primary Sjögren’s syndrome (pSS).  
31  
32

33  
34  
35 **48 Primary and secondary outcome measures**  
36

37  
38 49 Patients with newly diagnosed ILD during 2012–2013 were identified as ILD cases,  
39  
40 50 and selected CTD patients without ILD matching (1:4) the CTD cases for CTD  
41  
42 51 diagnosis, age, gender, disease duration and year of ILD diagnosis date were  
43  
44 52 identified as non-ILD controls. Data of hourly level of air pollutants 1 year before the  
45  
46 53 index date were obtained from Taiwan Environmental Protection Agency. The  
47  
48 54 association between ILD and air pollutant exposure was evaluated using logistic  
49  
50 55 regression analysis shown as adjusted odds ratios (aORs) with 95% confidence  
51  
52 56 intervals (CIs) after adjusting for potential confounders.  
53  
54  
55  
56

1  
2  
3 57 **Results:** We identified 495 newly diagnosed CTD-ILD patients, including 81 with  
4  
5  
6 58 SLE, 208 with RA, 48 with SSc, 41 with DMtis/PM and 117 with pSS. O<sub>3</sub> exposure  
7  
8  
9 59 (per 10 ppb) was associated with a decreased ILD risk in patients with RA (aOR,  
10  
11  
12 60 0.33; 95% CI, 0.12–0.86) and SSc (aOR, 0.03; 95% CI, 0.00–0.41) after adjusting for  
13  
14  
15 61 potential confounders.

16  
17  
18 62 **Conclusions:** A previously unrecognised inverse correlation was found between O<sub>3</sub>  
19  
20  
21 63 exposure and ILD in patients with RA and SSc. Further studies are warranted to  
22  
23  
24 64 explore the underlying mechanisms.

25  
26  
27 65 **Keywords:** air pollutant, ozone, interstitial lung disease, connective tissue disease  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 **67 Strengths and limitations of this study**  
4  
5

- 6 68 1.This study uses two nationwide databases to address the association between  
7  
8  
9 69 exposure to air pollutants and the development of interstitial lung disease (ILD) in  
10  
11  
12 70 patients with connective tissue disease (CTD).  
13  
14  
15 71 2.In this population-based study, we found that exposure to ozone (O<sub>3</sub>) was inversely  
16  
17  
18 72 associated with the incident CTD-ILD among patients with CTD in Taiwan.  
19  
20  
21 73 3.The present study highlights a previously unrecognized inverse association between  
22  
23  
24 74 O<sub>3</sub> and incident CTD-ILD and warrants further mechanistic study.  
25  
26  
27 75 4.The selection bias of this population-based study using claim data is minimal;  
28  
29  
30 76 however, the disease activity of CTD cannot be assessed.  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60



## 78 **Background**

79 Interstitial lung disease (ILD) is characterised by progressive inflammation and  
80 fibrosis, and accumulating evidence has demonstrated an association between  
81 exposure to air pollutants and the development and disease course of ILD.<sup>1 2</sup>  
82 Autoimmune rheumatic diseases show a strong correlated with ILD, including  
83 connective tissue disease-associated ILD (CTD-ILD) as well as interstitial pneumonia  
84 with autoimmune features; furthermore, the development of CTD-ILD has been  
85 reported to be an important cause of morbidity and mortality in patients with CTD.<sup>3 4</sup>  
86 A recent Taiwanese study reported that exposure to air pollutants, primarily nitrogen  
87 dioxide (NO<sub>2</sub>), was associated with incident systemic lupus erythematosus (SLE).<sup>5</sup>  
88 Given that exposure to air pollutants has been implicated in ILD and CTD, there is a  
89 need to investigate the association between exposure to air pollutants and CTD-ILD.

90 Among the distinct air pollutants, ozone (O<sub>3</sub>) is generated through chemical  
91 reactions, the so-called quenching reaction, among pollutants, primarily oxides of  
92 nitrogen, in the presence of sunlight.<sup>6</sup> Previous studies have reported an association  
93 between exposure to O<sub>3</sub> and the risk of acute exacerbation as well as poor pulmonary  
94 function in patients with idiopathic pulmonary fibrosis (IPF).<sup>7 8</sup> However, numerous  
95 recent studies have demonstrated that O<sub>3</sub> exposure appeared to have an inverse  
96 correlation with incident ILDs, and the quenching effect by O<sub>3</sub> might possibly  
97 underlie this intriguing correlation.<sup>2 9 10</sup> The aforementioned evidence indicates the

1  
2  
3 98 complex association between exposure to air pollutants, particularly O<sub>3</sub>, and ILD.  
4  
5  
6 99 Therefore, there is a crucial need to address the impact of exposure to air pollutants  
7  
8  
9 100 on the development of ILD among patients with CTD. The Taiwanese National  
10  
11  
12 101 Health Insurance Research Database (NHIRD) has facilitated population-based  
13  
14  
15 102 epidemiological studies. Therefore, in the present study, we aimed to conduct a  
16  
17  
18 103 population-based case-control study to explore the association between ILD  
19  
20  
21 104 development and exposure to air pollutants in patients with CTDs, including SLE,  
22  
23  
24 105 rheumatoid arthritis (RA), systemic sclerosis (SSc), dermatomyositis  
25  
26  
27 106 (DMtis)/polymyositis (PM) and primary Sjögren's syndrome (pSS), using the  
28  
29  
30 107 NHIRD.  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 109 **METHODS**  
4

5  
6 110 **Ethics approval**  
7

8  
9 111 This study was approved by the Institutional Review Board of Taichung Veterans

10  
11  
12 112 General Hospital, Taiwan (IRB number: CE14149B-3). Informed consent was waived

13  
14  
15 113 as all the data used for analyses were de-identified.  
16

17  
18 114 **Study design**  
19

20  
21 115 This research was a nationwide, population-based, matched case-control study.  
22

23  
24 116 **Data source**  
25

26  
27 117 Taiwan had launched a single-payer, compulsory National Health Insurance

28  
29 118 programme in 1995, with a nationwide coverage of up to 99.6% of Taiwan's

30  
31  
32 119 population in 2015.<sup>11</sup> The NHIRD contains all-inclusive claims data regarding

33  
34 120 information on registration, demographic characteristics, residence, medication

35  
36 121 prescription, diagnosis, examinations, procedures, surgeries, medical expenditure,

37  
38 122 outpatient services, inpatient services and medication prescription. The NHIRD also

39  
40 123 registered all patients with major illnesses such as CTDs and malignancies in the

41  
42 124 catastrophic illness registry in case the catastrophic illness-related diagnoses were

43  
44 125 validated by two independent specialists through a detailed review of patients'

45  
46 126 original medical records. A catastrophic illness certificate is then issued to these

47  
48 127 patients, who are then exempt from expenses for medical services. In the present

49  
50 128 study, we used multiple files, including registration file, ambulatory file, inpatient file  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 129 and catastrophic illness registry file, in the NHIRD from 1997 to 2013. The accuracy  
4  
5  
6 130 of the claims data from the NHIRD has been improved by regularly auditing the  
7  
8  
9 131 original medical records. The NHIRD was managed by the National Health Research  
10  
11  
12 132 Institute and was released for research purpose after the encryption of personal  
13  
14  
15 133 information.

### 18 134 **Identification of patients with CTD from the entire population in Taiwan**

21 135 We used the 1997–2013 NHIRD to identify patients with CTDs who were registered  
22  
23  
24 136 in the catastrophic illness registry between 2001 and 2013 for newly diagnosed CTDs,  
25  
26  
27 137 including SLE (International Classification of Diseases, Ninth Revision, Clinical  
28  
29  
30 138 Modification [ICD-9-CM] code 710.0), RA (ICD-9-CM codes 714.0 and  
31  
32  
33 139 714.30–714.33), SSc (ICD-9-CM code 710.1), DMtis (ICD-9-CM code 710.3), PM  
34  
35  
36 140 (ICD-9-CM code 710.4) or pSS (ICD-9-CM code, 710.2). The date of CTD diagnosis  
37  
38  
39 141 was defined as the date of initial application for catastrophic illness certificate for the  
40  
41  
42 142 corresponding CTD. From patients with CTD, we included those who did not have  
43  
44  
45 143 overlapping CTD diagnoses and those who did not have any ambulatory or inpatient  
46  
47  
48 144 visit with a diagnosis of ILD (ICD-9 code 515) or idiopathic interstitial pneumonia  
49  
50  
51 145 before the time of CTD diagnosis as the CTD cohort.

### 54 146 **Identification of ILD cases from the CTD cohort**

57 147 We identified those who had a new diagnosis of ILD (ICD-9 code 515) after the CTD  
58  
59  
60 148 diagnosis date during 2012–2013 as ILD cases. The index date was defined as the

1  
2  
3 149 date of first ambulatory or inpatient visit with a diagnosis of ILD.  
4  
5

6 150 **Selection of matched non-ILD controls from the CTD cohort**  
7

8  
9 151 From the CTD cohort, we randomly selected those who never had a diagnosis of ILD  
10  
11  
12 152 matching (1:4) the ILD cases for sex, age ( $\pm 4$  years), disease duration ( $\pm 4$  years) and  
13  
14  
15 153 the year of index date as non-ILD controls.  
16

17  
18 154 **Measurement of exposure to air pollutants**  
19

20  
21 155 The hourly levels of air pollutants 1 year before the index date were obtained from 60  
22  
23  
24 156 air quality monitoring stations across Taiwan, and the air pollutants included in the  
25  
26  
27 157 present study consisted of particulate matter  $< 2.5 \mu\text{m}$  in size (PM<sub>2.5</sub>), particulate  
28  
29  
30 158 matter  $< 10 \mu\text{m}$  in size (PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO),  
31  
32  
33 159 sulphur dioxide (SO<sub>2</sub>) and ozone (O<sub>3</sub>).<sup>12</sup> The ambient air pollutant concentrations at  
34  
35  
36 160 each residential location were estimated using a spatio-temporal model built via a  
37  
38  
39 161 deep-learning approach.<sup>13</sup> In brief, the ambient level of air pollutants at 374  
40  
41  
42 162 residential locations across Taiwan was estimated based on the data of three air  
43  
44  
45 163 quality monitoring stations near the location.  
46

47  
48 164 **Potential confounders**  
49

50  
51 165 Potential confounders that were adjusted for in the multivariable logistic regression  
52  
53  
54 166 model included age, gender, disease duration, Charlson comorbidity index (CCI), use  
55  
56  
57 167 of biological disease-modifying anti-rheumatic drugs (bDMARDs), use of  
58  
59  
60 168 conventional synthetic DMARDs (csDMARDs), use of immunosuppressants,

1  
2  
3 169 glucocorticoid dose (average daily prednisolone equivalent dose), urbanisation level  
4  
5  
6 170 of the patient's residence and the level of payroll-related insured amount. The  
7  
8  
9 171 presence of comorbidity was defined as the presence of one or more inpatient visits or  
10  
11  
12 172 at least three ambulatory visits with a corresponding ICD-9-CM code within 1 year  
13  
14  
15 173 before the index date. The CCI revised by Deyo *et al.* was applied to analyse the  
16  
17  
18 174 general comorbid medical condition.<sup>14</sup> In Taiwan, the available bDMARDs before 31  
19  
20  
21 175 December 2013 were anti-tumour necrosis factor (anti-TNF, including etanercept,  
22  
23  
24 176 adalimumab and golimumab), tocilizumab (TCZ) and rituximab (RTX). The  
25  
26  
27 177 csDMARDs included hydroxychloroquine (HCQ), sulphasalazine (SSZ),  
28  
29  
30 178 methotrexate (MTX) and leflunomide (LEF). Immunosuppressants included  
31  
32  
33 179 cyclophosphamide (CP), cyclosporin (CSA), azathioprine (AZA) and mycophenolate  
34  
35  
36 180 mofetil (MMF)/mycophenolic acid (MPA). Given that socioeconomic status might  
37  
38  
39 181 confound the association between air pollutant exposure and pulmonary diseases, we  
40  
41  
42 182 measured the socioeconomic status of each participant based on the urbanisation level  
43  
44  
45 183 and payroll-related insured amount.<sup>15</sup> The urbanisation level of the patient's residence  
46  
47  
48 184 was categorised into four clusters based on population density (people/km<sup>2</sup>),  
49  
50  
51 185 population ratio of elderly subjects aged >65 years, population ratio of subjects with  
52  
53  
54 186 educational levels of college or above, population ratio of agricultural workers and the  
55  
56  
57 187 number of physicians/100,000 subjects.<sup>16</sup> Payroll-related insured amount was  
58  
59  
60 188 transformed into categorical variable with four levels based on quantiles.

1  
2  
3 **189 Statistical analyses**  
4

5  
6 **190** Data are represented as the number of patients (%) for categorical variables and either  
7  
8  
9 **191** mean  $\pm$  standard deviation for continuous variables. Categorical variables were  
10  
11  
12 **192** compared using the  $\chi^2$  test or the Fisher's exact test, and continuous variables were  
13  
14  
15 **193** compared using the *t*-test. The association between the risk of ILD development and  
16  
17  
18 **194** the exposure to air pollutants was examined using a multivariable conditional logistic  
19  
20  
21 **195** regression analysis after adjusting for age, gender, CCI, urbanisation level, level of  
22  
23  
24 **196** payroll-related insured amount and medications for CTD and is represented as  
25  
26  
27 **197** adjusted odds ratio (aOR) with 95% confidence intervals (CIs). All data were  
28  
29  
30 **198** analysed using the statistical software version 9.3 (SAS Institute, Inc., Cary, NC,  
31  
32  
33 **199** USA). A p value  $<0.05$  was considered as statistically significant.  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## 201 RESULTS

### 202 Study subjects with CTDs

203 A total of 495 patients with CTD-ILD were included in this study, consisting of 81  
204 with SLE, 208 with RA, 48 with SSc, 41 with DMtis/PM and 117 with pSS. A total  
205 of 1980 patients were selected as matched non-ILD CTD controls. As shown in  
206 Table 1, patients with CTD-ILD and the non-ILD CTD controls had similar  
207 distributions of age, gender and disease duration. Compared with the non-ILD  
208 controls, patients with ILD had a higher CCI ( $1.8 \pm 1.5$  vs  $1.4 \pm 1.4$ ,  $p < 0.01$ ),  
209 received a higher dose of glucocorticoid (GC) ( $0.6 \pm 2.1$  vs  $0.2 \pm 0.8$  mg/day,  
210 prednisolone equivalent dose) and were more likely to use MTX (30.5% vs 24.1%,  $p$   
211  $< 0.01$ ), LEF (8.9% vs 5.2%,  $p < 0.01$ ), HCQ (60.8% vs 53.2%,  $p < 0.01$ ), CSA  
212 (21.4% vs 13.9%,  $p < 0.01$ ), AZA (5.5% vs 2.6%,  $p < 0.01$ ), CP (12.9% vs 9.3%,  $p =$   
213 0.02), MMF/MPA (5.1% vs 2.5%,  $p < 0.01$ ) and anti-TNF (30.5% vs 24.1%,  $p < 0.01$ ).  
214 The socioeconomic status, including the urbanisation level and the level of  
215 payroll-related insured amount, tended to be similar between patients with ILD and  
216 the non-ILD controls. Regarding the exposure to air pollutants, patients with ILD had  
217 a slightly lower average exposure to PM<sub>2.5</sub> ( $3.0 \pm 0.6$  vs  $3.1 \pm 0.7$   $\mu\text{g}/\text{m}^3$ ,  $p < 0.01$ ),  
218 PM<sub>10</sub> ( $5.1 \pm 1.1$  vs  $5.4 \pm 1.3$   $\mu\text{g}/\text{m}^3$ ,  $p < 0.01$ ), SO<sub>2</sub> ( $0.3 \pm 0.1$  vs  $0.4 \pm 0.1$  ppb,  $p <$   
219 0.01) and O<sub>3</sub> ( $2.7 \pm 0.3$  vs  $2.8 \pm 0.3$  ppb,  $p < 0.01$ ) (Table 1). In contrast, the exposure  
220 to NO<sub>2</sub> tended to be higher in patients with SLE with ILD than in those without ILD



1  
2  
3 221 (2.0 ± 0.6 vs 1.8 ± 0.5 ppb, p = 0.06). Altogether, these data showed that patients with  
4  
5  
6 222 CTD-ILD used a higher dose of GC; had greater proportions of using csDMARDs,  
7  
8  
9 223 immunosuppressants and anti-TNF and were exposed to lower levels of air pollutants,  
10  
11  
12 224 primarily PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> and O<sub>3</sub>, than the non-ILD controls.

13  
14  
15 225 **Association of the risk of ILD development with comorbidity and socioeconomic**  
16  
17  
18 226 **status**

19  
20  
21 227 As depicted in Table 2, CCI (aOR, 2.04; 95% CI 1.49–2.78) and the highest level of  
22  
23  
24 228 payroll-related insured amount (aOR, 1.64; 95% CI, 1.06–2.53), using the lowest  
25  
26  
27 229 level as reference) are significantly associated with a higher risk of developing ILD  
28  
29  
30 230 in all patients with CTD. In subgroup analyses according to CTD, the positive  
31  
32  
33 231 association between CCI and ILD remained significant in patients with RA, SSc and  
34  
35  
36 232 pSS, but not in patients with SLE and DMtis/PM (Tables 3–5). However, the positive  
37  
38  
39 233 association between the highest level of payroll-related insured amount and the risk  
40  
41  
42 234 of developing ILD turned to be non-significant in all CTD subgroups (Tables 3–5).

43  
44  
45 235 **Association between medications for CTD and the risk of ILD development**

46  
47  
48 236 As shown in Table 2, a positive association can be found between prednisolone  
49  
50  
51 237 equivalent dose (mg/day) and ILD risk (aOR 1.24, 95% CI, 1.12–1.34) in all patients  
52  
53  
54 238 with CTD. The positive association between GC dose and ILD risk remained  
55  
56  
57 239 statistically significant in patients with SLE, RA and pSS, but not in patients with  
58  
59  
60 240 SSc and DMtis/PM (Tables 3–5). Regarding the use of csDMARDs and

1  
2  
3 241 bDMARDs, we observed a positive association of ILD risk with HCQ use,  
4  
5  
6 242 immunosuppressant use among all patients with CTD (Table 2). However, subgroup  
7  
8  
9 243 analyses of CTD revealed that the positive association between HCQ use and ILD  
10  
11  
12 244 risk remained statistically significant only in patients with pSS (Tables 3–5). The  
13  
14  
15 245 positive association between the use of immunosuppressants and the risk of ILD  
16  
17  
18 246 development remained statistically significant in patients with RA and SSc, but not  
19  
20  
21 247 in patients with SLE, DMtis/PM and pSS.

#### 248 **Association between exposure to air pollutants and ILD development**

249 We then evaluated the factors associated with ILD development in patients with  
28  
29  
30 250 various CTDs. Exposure to O<sub>3</sub> (aOR, 0.36; 95% CI, 0.19–0.66) was found to have an  
31  
32  
33 251 inverse association with the risk of ILD development after adjusting for potential  
34  
35  
36 252 confounders. As shown in Tables 3–5, the subgroup analyses based on CTD revealed  
37  
38  
39 253 that the protective effect of O<sub>3</sub> against ILD risk was consistently present in patients  
40  
41  
42 254 with RA, SSc and DMtis/PM, but not in patients with SLE and pSS.

## 256 **DISCUSSION**

257 The association between O<sub>3</sub> exposure and ILD development currently remains  
258 elusive, and evidence regarding air pollutant exposure and CTD-ILD is extremely  
259 sparse despite the increasing awareness of CTD-ILD. In this population-based  
260 case-control study, we found that O<sub>3</sub> exposure was inversely associated with the  
261 development of ILD in patients with CTD after adjusting for potential confounders,  
262 including concomitant medications and socioeconomic status. The finding highlights  
263 the previously unrecognised association between exposure to air pollutants,  
264 particularly O<sub>3</sub>, and the development of CTD-ILD.

265 Although there is increasing evidence to implicate exposure to air pollutants in the  
266 development of ILD, current evidence remains elusive due to the varied definition  
267 for ILDs and the distinct air pollutants.<sup>17</sup> Rice MB *et al.* conducted a  
268 community-dwelling population-based study in Framingham and reported that higher  
269 long-term exposure to elemental carbon, an indicator of traffic pollution, was  
270 associated with the incidence and progression of interstitial lung abnormalities  
271 (ILAs); however, they found no association between average levels of PM<sub>2.5</sub> and  
272 incident ILAs.<sup>10</sup> In detail, unlike the positive association found between elemental  
273 carbon (OR 1.27, 95% CI 1.04–1.55) as well as PM<sub>2.5</sub> (OR 1.02, 95% CI 0.85–1.23)  
274 and ILAs, an inverse association was found between O<sub>3</sub> (OR 0.91, 95% CI 0.78–1.06)  
275 and ILAs. Similarly, Sack C *et al.* investigated 2671 participants from the

1  
2  
3 276 Multi-Ethnic Study of Atherosclerosis (MESA) Lung study and reported that  
4  
5  
6 277 exposure to ambient NO<sub>x</sub> was associated with a higher prevalence of ILAs, but the  
7  
8  
9 278 association was not found with exposure to PM<sub>2.5</sub> and O<sub>3</sub>.<sup>2</sup> Remarkably, consistent  
10  
11  
12 279 with our finding and the result of the study of Rice MB *et al.*, there was a significant  
13  
14  
15 280 inverse association between exposure to O<sub>3</sub> and incident ILAs (OR 0.30, 95% CI  
16  
17  
18 281 0.10–0.93) in never-smokers. Furthermore, one delicate Italian study also found the  
19  
20  
21 282 trend of the inverse association between O<sub>3</sub> exposure and the incidence rate of IPF.<sup>9</sup>  
22  
23  
24 283 These three studies and our findings in patients with CTDs found the consistent but  
25  
26  
27 284 previously unrecognised inverse association between exposure to O<sub>3</sub> and incident  
28  
29  
30 285 ILDs.

31  
32  
33 286 Studies have postulated that the quenching effect of O<sub>3</sub> could possibly be  
34  
35  
36 287 responsible for the inverse association between exposure to O<sub>3</sub> and incident ILDs.<sup>2 9 10</sup>  
37  
38  
39 288 In fact, ground-level O<sub>3</sub> is a secondary pollutant resulting from the photochemical  
40  
41  
42 289 reaction among traffic-related air pollutants, including NO<sub>2</sub> and volatile organic  
43  
44  
45 290 compounds.<sup>6</sup> A number of previous studies reported an inverse correlation between  
46  
47  
48 291 O<sub>3</sub> level and traffic-related air pollutants, including NO<sub>2</sub> and elemental carbon.<sup>2 9 10</sup>  
49  
50  
51 292 However, some studies have reported that exposure to O<sub>3</sub> and other air pollutants  
52  
53  
54 293 was positively associated with a deteriorated disease course in patients with ILD,  
55  
56  
57 294 including hospitalisation, poor lung function and exacerbation of ILD.<sup>7 8 18</sup> The  
58  
59  
60 295 aforementioned discordant findings with regard to the impact of O<sub>3</sub> exposure on

1  
2  
3 296 ILDs reflect the complexity of ILD pathogenesis, which consists of initial insults  
4  
5  
6 297 resulting in the influx of inflammatory cells as well as alveolar epithelial damage and  
7  
8  
9 298 the subsequent deterioration caused by the recruitment and activation of pulmonary  
10  
11  
12 299 fibroblasts and myofibroblasts.<sup>19</sup> Therefore, we postulate that O<sub>3</sub> exposure may exert  
13  
14  
15 300 distinct effects, including the quenching effect, on the development and clinical  
16  
17  
18 301 deterioration of ILD, and the present study further provides evidence regarding the  
19  
20  
21 302 impact of O<sub>3</sub> exposure on the development of CTD-ILD.

22  
23  
24 303 The pathogenesis of CTD-ILD has been increasingly investigated in recent years,  
25  
26  
27 304 and the balance among T cells, including innate lymphoid cells (ILCs), has been  
28  
29  
30 305 identified to play an important role in the pathogenesis of CTD-ILD.<sup>20-22</sup> Sendo S. *et*  
31  
32  
33 306 *al.*, using Zym-treated SKG mice to simulate RA-ILD, observed an increase in  
34  
35  
36 307 pathogenic Th17 cells in the inflamed lung tissue of RA-ILD mice and that  
37  
38  
39 308 tofacitinib ameliorated the interstitial lung disease.<sup>23</sup> In another recent study, which  
40  
41  
42 309 analysed the cytokine profiles of 40 patients with PM/DMtis-ILD, Th1 cells were  
43  
44  
45 310 found to play a key role in the pathogenesis of PM/DM-ILD.<sup>24</sup> Intriguingly, O<sub>3</sub> has  
46  
47  
48 311 been implicated in a high Th2 response in airway cells by enhancing the type 2  
49  
50  
51 312 ILC-associated pathway.<sup>25 26</sup> Therefore, the O<sub>3</sub>-associated expansion of the Th2  
52  
53  
54 313 pathway through ILCs may at least partly explain the potential protective effects of  
55  
56  
57 314 O<sub>3</sub> on the development of ILD in patients with CTD by ameliorating  
58  
59  
60 315 Th17/Th1-associated signalling in the airway.

1  
2  
3 316 Intriguingly, smoking was reported to affect the association between O<sub>3</sub> exposure  
4  
5  
6 317 and pulmonary diseases, including ILDs.<sup>2</sup> Sack C *et al.* observed that O<sub>3</sub> exerted a  
7  
8  
9 318 protective role in incident ILAs in never-smokers (OR 0.30, 95% CI 0.10–0.93)  
10  
11  
12 319 among participants in the MESA Lung study, whereas O<sub>3</sub> tended to be a risk factor  
13  
14  
15 320 for ILAs in ever-smokers (OR 1.44, 95% CI 0.52–4.01).<sup>2</sup> Smoking status is not  
16  
17  
18 321 recorded in the NHIRD; however, the majority of enrolled patients with CTD were  
19  
20  
21 322 females (74.9%), and there is a marked low prevalence of tobacco use among  
22  
23  
24 323 females in Taiwan (2.6%). Thus, we believe that the magnitude of the protective  
25  
26  
27 324 effect of O<sub>3</sub> against the development of CTD-ILD might at least partly be attributed  
28  
29  
30 325 by the high proportion of females in the study population.<sup>27</sup>

31  
32  
33 326 There are some limitations in the present study. First, the NHIRD cannot provide  
34  
35  
36 327 laboratory data; however, the medication data are comprehensive. In addition, the  
37  
38  
39 328 diagnoses of SLE, RA and SS were validated by at least two experienced and  
40  
41  
42 329 qualified rheumatologists by reviewing patients' medical charts, laboratory findings  
43  
44  
45 330 and images to issue a catastrophic illness certificate. Second, the disease activity of  
46  
47  
48 331 CTD is not recorded, but we believe that we have adjusted for the essential  
49  
50  
51 332 CTD-associated medications, which should largely reflect the disease activity.

52  
53  
54 333 In conclusion, exposure to air pollutants is increasingly found to be associated  
55  
56  
57 334 with the development of a number of pulmonary diseases, including ILDs.  
58  
59  
60

1  
2  
3 335 Recent evidence has demonstrated that O3 exposure appeared to have a negative  
4  
5  
6 336 association with the development of ILDs. In the present population-based  
7  
8  
9 337 case-control study, we found that exposure to O3 was inversely associated with  
10  
11  
12 338 incident CTD-ILDs among patients with CTD in Taiwan. Further studies are  
13  
14  
15 339 warranted to validate these findings and explore the underlying mechanisms.  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

For peer review only

1  
2  
3 341 **Authors' contributions:**  
4

5  
6 342 Conceived and designed the experiments: HHC, WCC, JCY, YHC and DYC.  
7

8  
9 343 Acquired data: YMY, CHL, JCY and HHC. Contributed materials/analysis tools:  
10

11  
12 344 WCC, YMY, JCY and HHC. Wrote the paper: HHC, JCY and WCC.  
13

14  
15 345 **Funding:**  
16

17  
18 346 Funding This study was supported in part by grants from Veterans General  
19

20  
21 347 Hospitals and the University System of Taiwan Joint Research Program  
22

23  
24 348 (VGHUST109-V2-2-1 and VGHUST109-V2-2-3). The funders had no role in the  
25

26  
27 349 study design, data collection and analysis, decision to publish or preparation of the  
28

29  
30 350 manuscript.  
31

32  
33 351 **Competing interests:**  
34

35  
36 352 The authors have declared that no competing interests exist.  
37

38  
39 353 **Ethics approval**  
40

41  
42 354 This study was approved by the Institutional Review Board of Taichung Veterans  
43

44  
45 355 General Hospital, Taiwan (IRB number: CE14149B-3).  
46

47  
48 356 **Patient and Public Involvement**  
49

50  
51 357 This research was performed without patient involvement. Patients were not invited  
52

53  
54 358 with regards to design of study, measurement of outcome, and interpretation of  
55

56  
57 359 results.  
58

59  
60 360 **Data sharing statement**



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

361 All of the data and materials are provided in the manuscript

For peer review only

363 **REFERENCES**

- 364 1. Araki T, Putman RK, Hatabu H, et al. Development and Progression of Interstitial  
365 Lung Abnormalities in the Framingham Heart Study. *Am J Respir Crit Care Med*  
366 2016;194:1514-22.
- 367 2. Sack C, Vedal S, Sheppard L, et al. Air pollution and subclinical interstitial lung  
368 disease: the Multi-Ethnic Study of Atherosclerosis (MESA) air-lung study. *Eur*  
369 *Respir J* 2017;50
- 370 3. Wilfong EM, Lentz RJ, Guttentag A, et al. Interstitial Pneumonia With  
371 Autoimmune Features: An Emerging Challenge at the Intersection of  
372 Rheumatology and Pulmonology. *Arthritis Rheumatol* 2018;70:1901-13.
- 373 4. Fischer A, du Bois R. Interstitial lung disease in connective tissue disorders. *Lancet*  
374 2012;380:689-98.
- 375 5. Tang KT, Tsuang BJ, Ku KC, et al. Relationship between exposure to air pollutants  
376 and development of systemic autoimmune rheumatic diseases: a nationwide  
377 population-based case-control study. *Ann Rheum Dis* 2019;78:1288-91.
- 378 6. Brunekreef B, Holgate ST. Air pollution and health. *Lancet* 2002;360:1233-42.
- 379 7. Johannson KA, Vittinghoff E, Lee K, et al. Acute exacerbation of idiopathic  
380 pulmonary fibrosis associated with air pollution exposure. *Eur Respir J*  
381 2014;43:1124-31.
- 382 8. Johannson KA, Vittinghoff E, Morisset J, et al. Air Pollution Exposure Is  
383 Associated With Lower Lung Function, but Not Changes in Lung Function, in  
384 Patients With Idiopathic Pulmonary Fibrosis. *Chest* 2018;154:119-25.
- 385 9. Conti S, Harari S, Caminati A, et al. The association between air pollution and the  
386 incidence of idiopathic pulmonary fibrosis in Northern Italy. *Eur Respir J* 2018;51
- 387 10. Rice MB, Li W, Schwartz J, et al. Ambient air pollution exposure and risk and  
388 progression of interstitial lung abnormalities: the Framingham Heart Study. *Thorax*  
389 2019;74:1063-69.
- 390 11. The National Health Insurance Statistics 2015: National Health Insurance  
391 Administration, Ministry of Health and Welfare, Taiwan.
- 392 12. Environmental Protection Administration T. Taiwan Air Quality Monitoring Net  
393 work. <https://taqm.epa.gov.tw/taqm/en/b0201.aspx> [Accessed in 10 October. 2019]
- 394 13. Qi Y, Li Q, Karimian H, et al. A hybrid model for spatiotemporal forecasting of  
395 PM2.5 based on graph convolutional neural network and long short-term memory.  
396 *Sci Total Environ* 2019;664:1-10.
- 397 14. Deyo RA, Cherkin DC, Ciol MA. Adapting a clinical comorbidity index for use  
398 with ICD-9-CM administrative databases. *J Clin Epidemiol* 1992;45:613-9.
- 399 15. Kloog I, Ridgway B, Koutrakis P, et al. Long- and short-term exposure to PM2.5  
400 and mortality: using novel exposure models. *Epidemiology* 2013;24:555-61.

- 1  
2 401 16. Chen BY, Chen CH, Chuang YC, et al. Changes in the relationship between  
3 402 childhood asthma and ambient air pollution in Taiwan: Results from a nationwide  
4 403 survey repeated 5 years apart. *Pediatr Allergy Immunol* 2019;30:188-94.  
5  
6 404 17. Johannson KA, Balmes JR, Collard HR. Air pollution exposure: a novel  
7 405 environmental risk factor for interstitial lung disease? *Chest* 2015;147:1161-67.  
8  
9 406 18. Sese L, Nunes H, Cottin V, et al. Role of atmospheric pollution on the natural  
10 407 history of idiopathic pulmonary fibrosis. *Thorax* 2018;73:145-50.  
11  
12 408 19. Hoyles RK, Derrett-Smith EC, Khan K, et al. An essential role for resident  
13 409 fibroblasts in experimental lung fibrosis is defined by lineage-specific deletion of  
14 410 high-affinity type II transforming growth factor beta receptor. *Am J Respir Crit*  
15 411 *Care Med* 2011;183:249-61.  
16  
17 412 20. Mi S, Li Z, Yang HZ, et al. Blocking IL-17A promotes the resolution of  
18 413 pulmonary inflammation and fibrosis via TGF-beta1-dependent and -independent  
19 414 mechanisms. *J Immunol* 2011;187:3003-14.  
20  
21 415 21. Desai O, Winkler J, Minasyan M, et al. The Role of Immune and Inflammatory  
22 416 Cells in Idiopathic Pulmonary Fibrosis. *Front Med (Lausanne)* 2018;5:43.  
23  
24 417 22. Castellanos JG, Longman RS. The balance of power: innate lymphoid cells in  
25 418 tissue inflammation and repair. *J Clin Invest* 2019;129:2640-50.  
26  
27 419 23. Sendo S, Saegusa J, Yamada H, et al. Tofacitinib facilitates the expansion of  
28 420 myeloid-derived suppressor cells and ameliorates interstitial lung disease in SKG  
29 421 mice. *Arthritis Res Ther* 2019;21:184.  
30  
31 422 24. Matsuda S, Kotani T, Ishida T, et al. Exploration of pathomechanism using  
32 423 comprehensive analysis of serum cytokines in  
33 424 polymyositis/dermatomyositis-interstitial lung disease. *Rheumatology (Oxford)*  
34 425 2020;59:310-18.  
35  
36 426 25. Flayer CH, Larson ED, Joseph A, et al. Ozone-induced enhancement of airway  
37 427 hyperreactivity in rhesus macaques: Effects of antioxidant treatment. *J Allergy Clin*  
38 428 *Immunol* 2020;145:312-23.  
39  
40 429 26. Kumagai K, Lewandowski R, Jackson-Humbles DN, et al. Ozone-Induced Nasal  
41 430 Type 2 Immunity in Mice Is Dependent on Innate Lymphoid Cells. *Am J Respir*  
42 431 *Cell Mol Biol* 2016;54:782-91.  
43  
44 432 27. Taiwan tobacco control annual report 2018. Health Promotion Administration,  
45 433 Ministry of Health and Welfare, Taiwan.  
46 434 <https://health99.hpa.gov.tw/media/public/pdf/22077.pdf> [Accessed in 10 October.  
47 435 2019]. 2018.  
48  
49  
50  
51  
52  
53  
54  
55 436

438

**Table 1. Characteristics of enrolled subjects with ILDs and matched non-ILD controls**

Variable	Non-ILD (n = 1980)	ILD (n = 495)	p value
<b>Basic data</b>			
Age, years	59.5±14.3	60.2±14.7	0.33
Gender, female	1484 (74.9)	371 (74.9)	1.00
Disease duration, years	6.6±5.1	6.9±5.8	0.38
CCI	1.4±1.4	1.8±1.5	<0.01
<b>Urbanisation</b>			
Level 1	581 (29.3)	162 (32.7)	0.53
Level 2	612 (30.9)	146 (29.5)	
Level 3	314 (15.9)	73 (14.7)	
Level 4	473 (23.9)	114 (23.0)	
<b>Payroll-related insured amount, NTD</b>			
≤15,840	889 (44.9)	231 (46.7)	0.10
15,841–28,800	622 (31.4)	146 (29.5)	
28,801–45,800	363 (18.3)	79 (16.0)	
≥45,801	106 (5.4)	39 (7.9)	
<b>Medication</b>			
<b>csDMARDs</b>			
Methotrexate	478 (24.1)	151 (30.5)	<0.01
Sulphasalazine	385 (19.4)	102 (20.6)	0.56
Leflunomide	103 (5.2)	44 (8.9)	<0.01
Hydroxychloroquine	1,053 (53.2)	301 (60.8)	<0.01
Cyclosporin	275 (13.9)	106 (21.4)	<0.01
Azathioprine	51 (2.6)	27 (5.5)	<0.01
Cyclophosphamide	185 (9.3)	64 (12.9)	0.02
Mycophenolate mofetil	50 (2.5)	25 (5.1)	<0.01
Glucocorticoid	1,275 (64.4)	400 (80.8)	<0.01
Prednisolone equivalent, mg/day	0.2 ± 0.8	0.6 ± 2.1	<0.01
<b>bDMARDs</b>			
<b>Anti-TNF</b>			
Etanercept	102 (5.2)	41 (8.3)	0.01
Adalimumab	62 (3.1)	25 (5.1)	0.04
Golimumab	37 (1.9)	17 (3.4)	0.03
	3 (0.2)	0 (0)	0.39

1				
2	Tocilizumab	1 (0.1)	2 (0.4)	0.04
3				
4	Rituximab	18 (0.9)	10 (2.0)	0.04
5	<b>Air pollutant levels</b>			
6	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	3.1 $\pm$ 0.7	3.0 $\pm$ 0.6	<0.001
7	PM10 ( $\mu\text{g}/\text{m}^3$ )	5.4 $\pm$ 1.3	5.1 $\pm$ 1.1	<0.001
8	SO <sub>2</sub> (ppb)	0.4 $\pm$ 0.1	0.3 $\pm$ 0.1	<0.001
9	NO <sub>2</sub> (ppb)	1.8 $\pm$ 0.6	1.8 $\pm$ 0.5	0.44
10	CO (ppm)	0.5 $\pm$ 0.2	0.6 $\pm$ 0.2	0.30
11	O <sub>3</sub> (ppb)	2.8 $\pm$ 0.3	2.7 $\pm$ 0.3	<0.001
12				
13				
14				
15				

16 Data are presented as mean  $\pm$  standard deviation and N (%). \*Prednisolone equivalent.

17 Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; DMARDs,  
 18 disease-modifying anti-rheumatic drugs; MMF, mycophenolate mofetil; MPA, mycophenolic acid;  
 19 TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5  $\mu\text{m}$ ; PM10,  
 20 particulate matter <10  $\mu\text{m}$ ; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>,  
 21 ozone.  
 22  
 23  
 24

25 439

Peer review only

441

442 **Table 2. Crude and adjusted odds ratios for the association between ILD and**  
 443 **variables in patients with CTD**

	OR (95% CI)	P	aOR (95% CI)	p
<b>Basic data</b>				
Age, years	1.00 (0.99–1.01)	0.332	1.01 (0.99–1.02)	0.079
Gender, male	1.00 (0.80–1.26)	1.000	0.92 (0.72–1.18)	0.523
Disease duration, years	1.01 (0.99–1.03)	0.345	1.01 (0.99–1.03)	0.602
CCI	2.42 (1.81–3.24)	<0.001	2.04 (1.49–2.78)	<0.001
<b>CTD group</b>				
SLE	Reference		Reference	
RA	1.00 (0.75–1.33)	1.000	0.96 (0.64–1.43)	0.831
SSc	1.00 (0.67–1.49)	1.000	1.43 (0.91–2.23)	0.120
DMtis/PM	1.00 (0.66–1.52)	1.000	1.23 (0.76–2.01)	0.405
pSS	1.00 (0.73–1.37)	1.000	1.77 (1.19–2.63)	0.005
<b>Urbanisation</b>				
Level 1	Reference		Reference	
Level 2	0.86 (0.67–1.10)	0.223	0.94 (0.68–1.30)	0.714
Level 3	0.83 (0.61–1.14)	0.248	1.11 (0.76–1.63)	0.581
Level 4	0.86 (0.66–1.13)	0.288	1.02 (0.66–1.56)	0.939
<b>Payroll-related insured amount, NTD</b>				
≤15,840	Reference		Reference	
15,841–28,800	0.90 (0.72–1.14)	0.389	0.96 (0.74–1.25)	0.776
28,801–45,800	0.84 (0.63–1.11)	0.220	0.88 (0.65–1.20)	0.426
≥45,801	1.42 (0.96–2.10)	0.084	1.64 (1.06–2.53)	0.025
<b>Medication</b>				
Methotrexate	1.38 (1.11–1.71)	0.004	1.17 (0.91–1.51)	0.216
Sulphasalazine	1.08 (0.84–1.37)	0.561	0.82 (0.62–1.08)	0.162
Leflunomide	1.78 (1.23–2.57)	0.002	1.35 (0.91–2.01)	0.140
Hydroxychloroquine	1.37 (1.12–1.67)	0.002	1.28 (1.03–1.58)	0.024
Immunosuppressants	1.69 (1.32–2.17)	<0.001	1.53 (1.15–2.02)	0.003
Steroid*, mg/day	1.31 (1.18–1.44)	<0.001	1.24 (1.12–1.37)	<0.001
Anti-TNF	1.66 (1.14–2.42)	0.008	1.20 (0.79–1.83)	0.392
Tocilizumab	8.03 (0.73–88.72)	0.089	6.61 (0.56–77.84)	0.134
Rituximab	2.25 (1.03–4.90)	0.042	1.65 (0.73–3.74)	0.227
<b>Air pollutants</b>				
PM2.5 (per 10 µg/m <sup>3</sup> )	0.69 (0.60–0.80)	<0.001	0.80 (0.53–1.22)	0.308
PM10 (per 10 µg/m <sup>3</sup> )	0.81 (0.74–0.88)	<0.001	1.00 (0.78–1.29)	0.996

SO <sub>2</sub> (per 10 ppb)	0.19 (0.07–0.48)	<0.001	0.53 (0.13–2.13)	0.371
NO <sub>2</sub> (per 10 ppb)	1.07 (0.90–1.28)	0.440	0.80 (0.44–1.46)	0.466
CO (per 1 ppm)	1.25 (0.82–1.91)	0.299	0.97 (0.31–3.10)	0.964
O <sub>3</sub> (per 10 ppb)	0.43 (0.30–0.62)	<0.001	0.36 (0.19–0.66)	0.001

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CTD, connective tissue disease; OR, odds ratio; CI, confidence interval; CCI, Charlson comorbidity index; TNF, tumour necrosis factor; NA, not available; PM<sub>2.5</sub>, particulate matter <2.5 µm; PM<sub>10</sub>, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

444

For peer review only

**Table 3. Crude and adjusted odds ratios for the association between the risk of ILD development and variables in patients with rheumatoid arthritis**

Variable	Univariable		Multivariable	
	OR (95% CI)	P value	aOR (95% CI)	p value
<b>Basic data</b>				
Age, years	1.01 (0.99–1.02)	0.146	1.01 (0.99–1.03)	0.200
Gender, male	1.00 (0.72–1.39)	1.000	0.99 (0.69–1.42)	0.952
Disease duration, years	1.02 (0.99–1.05)	0.165	1.03 (0.99–1.06)	0.130
CCI	5.99 (2.41–14.89)	<0.001	3.95 (1.53–10.15)	0.004
<b>Urbanisation</b>				
Level 1	Reference		Reference	
Level 2	1.00 (0.67–1.48)	0.982	1.11 (0.65–1.88)	0.706
Level 3	1.11 (0.69–1.79)	0.669	1.48 (0.81–2.70)	0.207
Level 4	1.11 (0.74–1.66)	0.627	1.51 (0.76–2.98)	0.240
<b>Payroll-related insured amount, NTD</b>				
≤15,840	Reference		Reference	
15,841–28,800	0.71 (0.50–1.01)	0.056	0.68 (0.44–1.03)	0.070
28,801–45,800	0.83 (0.53–1.32)	0.436	1.06 (0.62–1.80)	0.837
≥45,801	1.23 (0.56–2.69)	0.612	1.87 (0.78–4.48)	0.158
<b>Medication</b>				
Methotrexate	1.42 (1.05–1.93)	0.024	1.22 (0.87–1.71)	0.254
Sulphasalazine	1.01 (0.74–1.37)	0.975	0.78 (0.56–1.09)	0.147
Leflunomide	1.88 (1.26–2.82)	0.002	1.39 (0.90–2.16)	0.141
Hydroxychloroquine	1.57 (1.15–2.15)	0.004	1.31 (0.93–1.84)	0.128
Immunosuppressants	2.50 (1.50–4.16)	<0.001	2.04 (1.17–3.55)	0.012
Steroid*, mg/day	2.65 (1.70–4.14)	<0.001	2.22 (1.42–3.47)	0.001
Anti-TNF	1.76 (1.18–2.64)	0.006	1.19 (0.76–1.87)	0.440
Tocilizumab	8.07 (0.73–89.41)	0.089	8.99 (0.74–109.40)	0.085
Rituximab	2.42 (1.09–5.37)	0.030	1.39 (0.58–3.37)	0.461
<b>Air pollutants</b>				
PM2.5 (per 10 µg/m <sup>3</sup> )	0.89 (0.71–1.11)	0.294	1.20 (0.62–2.33)	0.596
PM10 (per 10 µg/m <sup>3</sup> )	0.91 (0.81–1.04)	0.158	0.82 (0.56–1.21)	0.324
SO <sub>2</sub> (per 10 ppb)	0.70 (0.17–2.81)	0.613	3.15 (0.40–24.77)	0.276
NO <sub>2</sub> (per 10 ppb)	1.00 (0.77–1.30)	1.000	0.71 (0.28–1.79)	0.462
CO (per 1 ppm)	0.95 (0.48–1.89)	0.878	1.06 (0.16–6.84)	0.952
O <sub>3</sub> (per 10 ppb)	0.60 (0.34–1.04)	0.071	0.33 (0.12–0.86)	0.024

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.



**Table 4. Crude and adjusted odds ratios for the association between the risk of ILD development and variables in patients with systemic lupus erythematosus and primary Sjögren's syndrome**

Variable	Systemic lupus erythematosus				Primary Sjögren's syndrome			
	Univariable		Multivariable		Univariable		Multivariable	
	OR (95% CI)	p	aOR (95% CI)	p	OR (95% CI)	p	aOR (95% CI)	p
<b>Basic data</b>								
Age, years	1.00 (0.99–1.02)	0.657	1.01 (0.99–1.03)	0.299	1.00 (0.99–1.02)	0.867	1.00 (0.98–1.02)	0.949
Gender, male	1.00 (0.50–1.99)	1.000	0.91 (0.42–1.95)	0.802	1.00 (0.53–1.91)	1.000	0.99 (0.49–2.02)	0.986
Disease duration, years	1.00 (0.96–1.04)	0.969	1.00 (0.96–1.05)	0.985	1.03 (0.97–1.09)	0.306	1.05 (0.99–1.12)	0.140
CCI	4.03 (0.94–17.23)	0.060	2.79 (0.60–13.03)	0.192	2.31 (1.51–3.52)	<0.001	2.57 (1.61–4.10)	<0.001
<b>Urbanisation</b>								
Level 1	Reference		Reference		Reference		Reference	
Level 2	0.57 (0.31–1.06)	0.077	0.89 (0.38–2.05)	0.781	0.74 (0.45–1.25)	0.260	0.83 (0.42–1.65)	0.598
Level 3	0.73 (0.35–1.51)	0.394	1.44 (0.56–3.71)	0.454	0.80 (0.43–1.47)	0.466	1.02 (0.46–2.28)	0.954
Level 4	0.68 (0.34–1.34)	0.262	1.07 (0.37–3.14)	0.903	0.90 (0.51–1.59)	0.728	0.66 (0.25–1.70)	0.388
<b>Payroll-related insured amount, NTD</b>								
≤15,840	Reference		Reference		Reference		Reference	
15,841–28,800	0.86 (0.48–1.56)	0.629	0.93 (0.48–1.79)	0.823	0.74 (0.45–1.25)	0.260	0.83 (0.42–1.65)	0.598
28,801–45,800	1.09 (0.56–2.10)	0.807	1.09 (0.52–2.28)	0.823	0.80 (0.43–1.47)	0.466	1.02 (0.46–2.28)	0.954
≥45,801	1.52 (0.61–3.81)	0.368	1.55 (0.55–4.34)	0.406	0.90 (0.51–1.59)	0.728	0.66 (0.25–1.70)	0.388
<b>Medication</b>								
Methotrexate	1.09 (0.30–4.02)	0.892	0.94 (0.22–4.09)	0.937	1.12 (0.41–3.07)	0.832	1.14 (0.36–3.64)	0.829

5	Sulphasalazine	2.80 (0.97–8.11)	0.058	3.09 (0.94–10.18)	0.064	1.21 (0.48–3.09)	0.689	1.07 (0.37–3.07)	0.899	
6	Leflunomide	<0.01 (<0.01–>99)	0.990	<0.01 (<0.01–>99)	0.989	0.66 (0.08–5.57)	0.706	0.59 (0.06–5.55)	0.644	
8	Hydroxychloroquine	1.09 (0.65–1.83)	0.752	1.05 (0.60–1.85)	0.866	1.22 (0.79–1.87)	0.369	1.13 (0.70–1.82)	0.618	
9	Immunosuppressants	1.71 (1.04–2.80)	0.034	1.56 (0.90–2.72)	0.116	1.21 (0.63–2.32)	0.578	0.95 (0.44–2.05)	0.890	
11	Steroid*, mg/day	1.19 (1.04–1.36)	0.009	1.15 (1.00–1.31)	0.044	1.47 (1.06–2.04)	0.022	1.48 (1.01–2.16)	0.042	
13	<b>Air pollutants</b>									
14	PM2.5 (per 10 µg/m <sup>3</sup> )	0.60 (0.41–0.87)	0.007	0.37 (0.13–1.02)	0.055	0.61 (0.45–0.85)	0.003	0.70 (0.28–1.76)	0.445	
15	PM10 (per 10 µg/m <sup>3</sup> )	0.78 (0.63–0.97)	0.022	1.45 (0.78–2.70)	0.243	0.76 (0.63–0.91)	0.003	1.02 (0.58–1.79)	0.944	
17	SO <sub>2</sub> (per 10 ppb)	0.24 (0.02–2.42)	0.227	0.57 (0.02–18.13)	0.753	0.05 (0.01–0.45)	0.008	0.14 (0.01–3.90)	0.246	
18	NO <sub>2</sub> (per 10 ppb)	1.50 (0.98–2.31)	0.064	0.91 (0.19–4.43)	0.908	1.00 (0.68–1.46)	0.980	0.69 (0.19–2.50)	0.571	
20	CO (per 1 ppm)	2.65 (1.04–6.75)	0.041	1.35 (0.09–20.85)	0.829	1.43 (0.58–3.54)	0.434	2.33 (0.21–26.27)	0.494	
21	O <sub>3</sub> (per 10 ppb)	0.26 (0.10–0.67)	0.005	0.33 (0.06–1.68)	0.181	0.60 (0.28–1.26)	0.175	0.60 (0.18–2.06)	0.419	

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

**Table 5. Crude and adjusted odds ratios for the association between the risk of ILD development and variables in patients with systemic sclerosis and dermatomyositis/polymyositis**

Variable	Systemic sclerosis				Dermatomyositis/polymyositis			
	Univariable		Multivariable		Univariable		Multivariable	
	OR (95% CI)	p	aOR (95% CI)	p	OR (95% CI)	p	aOR (95% CI)	p
<b>Basic data</b>								
Age, years	1.00 (0.98–1.02)	0.924	1.01 (0.98–1.04)	0.550	1.00 (0.99–1.02)	0.867	1.00 (0.98–1.02)	0.949
Gender, male	1.00 (0.53–1.90)	1.000	0.86 (0.39–1.93)	0.721	1.00 (0.53–1.91)	1.000	0.99 (0.49–2.02)	0.986
Disease duration, years	0.98 (0.92–1.04)	0.441	0.98 (0.92–1.06)	0.638	1.03 (0.97–1.09)	0.306	1.05 (0.99–1.12)	0.140
CCI	5.31 (1.23–22.89)	0.025	8.62 (1.65–45.14)	0.011	2.31 (1.51–3.52)	<0.001	2.57 (1.61–4.10)	<0.001
<b>Urbanisation</b>								
Level 1	Reference		Reference		Reference		Reference	
Level 2	1.19 (0.54–2.59)	0.666	1.18 (0.40–3.49)	0.762	0.74 (0.45–1.25)	0.260	0.83 (0.42–1.65)	0.598
Level 3	0.55 (0.17–1.80)	0.322	0.57 (0.12–2.78)	0.484	0.80 (0.43–1.47)	0.466	1.02 (0.46–2.28)	0.954
Level 4	0.68 (0.29–1.58)	0.366	0.54 (0.12–2.53)	0.434	0.90 (0.51–1.59)	0.728	0.66 (0.25–1.70)	0.388
<b>Payroll-related insured amount, NTD</b>								
≤15,840	Reference		Reference		Reference		Reference	
15,841–28,800	1.16 (0.55–2.46)	0.698	1.32 (0.54–3.21)	0.545	0.74 (0.45–1.25)	0.260	0.83 (0.42–1.65)	0.598
28,801–45,800	0.82 (0.32–2.09)	0.681	0.69 (0.22–2.16)	0.524	0.80 (0.43–1.47)	0.466	1.02 (0.46–2.28)	0.954
≥45,801	1.76 (0.56–5.52)	0.331	1.99 (0.52–7.54)	0.314	0.90 (0.51–1.59)	0.728	0.66 (0.25–1.70)	0.388
<b>Medication</b>								

1									
2									
3									
4									
5	Methotrexate	0.61 (0.17–2.14)	0.438	0.53 (0.12–2.28)	0.394	1.12 (0.41–3.07)	0.832	1.14 (0.36–3.64)	0.829
6	Sulphasalazine	<0.01 (<0.01–>99)	0.985	<0.01 (<0.01–>99)	0.976	1.21 (0.48–3.09)	0.689	1.07 (0.37–3.07)	0.899
7	Leflunomide	>99 (<0.01–>99)	0.987	>99 (<0.01–>99)	0.992	0.66 (0.08–5.57)	0.706	0.59 (0.06–5.55)	0.644
8	Hydroxychloroquine	0.91 (0.46–1.80)	0.784	0.90 (0.41–1.97)	0.796	1.22 (0.79–1.87)	0.369	1.13 (0.70–1.82)	0.618
9	Immunosuppressants	2.37 (1.11–5.07)	0.026	2.61 (1.07–6.36)	0.034	1.21 (0.63–2.32)	0.578	0.95 (0.44–2.05)	0.890
10	Steroid*, mg/day	1.33 (0.82–2.18)	0.251	1.38 (0.77–2.47)	0.276	1.47 (1.06–2.04)	0.022	1.48 (1.01–2.16)	0.042
11									
12	<b>Air pollutants</b>								
13									
14	PM2.5 (per 10 µg/m <sup>3</sup> )	0.54 (0.33–0.87)	0.012	0.90 (0.19–4.26)	0.899	0.61 (0.45–0.85)	0.003	0.70 (0.28–1.76)	0.445
15	PM10 (per 10 µg/m <sup>3</sup> )	0.67 (0.51–0.89)	0.005	1.08 (0.40–2.95)	0.881	0.76 (0.63–0.91)	0.003	1.02 (0.58–1.79)	0.944
16	SO <sub>2</sub> (per 10 ppb)	0.02 (<0.01–0.60)	0.023	0.09 (<0.01–14.50)	0.349	0.05 (0.01–0.45)	0.008	0.14 (0.01–3.90)	0.246
17	NO <sub>2</sub> (per 10 ppb)	1.01 (0.58–1.75)	0.985	0.25 (0.03–2.42)	0.228	1.00 (0.68–1.46)	0.980	0.69 (0.19–2.50)	0.571
18	CO (per 1 ppm)	1.04 (0.27–4.04)	0.955	2.14 (0.03–181.54)	0.737	1.43 (0.58–3.54)	0.434	2.33 (0.21–26.27)	0.494
19	O <sub>3</sub> (per 10 ppb)	0.23 (0.06–0.80)	0.021	0.03 (0.00–0.41)	0.008	0.60 (0.28–1.26)	0.175	0.60 (0.18–2.06)	0.419

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

## STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation
<b>Title and abstract</b>	1	Air pollutants and development of interstitial lung disease in patients with connective tissue disease: a population-based study Structured abstract on page3-4
<b>Introduction</b>		
Background/rationale	2	Page 6-7
Objectives	3	Page 6, line 102-107
<b>Methods</b>		
Study design	4	Page 8, line 114-115
Setting	5	Page 9, line 116-133
Participants	6	Page 9-10, case group line 146-149, control line 150-153
Variables	7	Page 10-11, line 164-188
Data sources/ measurement	8*	Page 8-9, line 116-133
Bias	9	Page 10-11, line 164-188
Study size	10	Page 9, line 134-140
Quantitative variables	11	Page 10, line 154-163
Statistical methods	12	Page 12, line 189-199
<b>Results</b>		
Participants	13*	Page 13, line 203-205
Descriptive data	14*	Page 13-14, line 205-207 (table 1)
Outcome data	15*	Page 13-14, line 207-224
Main results	16	Page 14-15, line 225-254
Other analyses	17	N/A
<b>Discussion</b>		
Key results	18	Page 16, line 257-264
Limitations	19	Page 19, line 326-332
Interpretation	20	Page 16, line 265-325
Generalisability	21	Page 19, line 321-325
<b>Other information</b>		
Funding	22	Page 21, line 345-350

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at [www.strobe-statement.org](http://www.strobe-statement.org).

# BMJ Open

## Air pollutants and development of interstitial lung disease in patients with connective tissue disease: a population-based case-control study in Taiwan

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2020-041405.R1
Article Type:	Original research
Date Submitted by the Author:	21-Sep-2020
Complete List of Authors:	Chen, Hsin-Hua; Taichung Veterans General Hospital, Division of Allergy, Immunology and Rheumatology Yong, You-Ming; National Chung Hsing University, Department of Management Information Systems Lin, Ching-Heng ; Taichung Veterans General Hospital, Department of Medical Research Chen, Yi-Hsing; Taichung Veterans General Hospital, Division of Allergy, Immunology and Rheumatology Chen, Der-Yuan; China Medical University Hospital, Rheumatology and Immunology Center Ying, Jia-Ching; National Chung Hsing University, Department of Management Information Systems Chao, Wen-Cheng; Taichung Veterans General Hospital, Department of Medical Research
<b>Primary Subject Heading</b>:	Rheumatology
Secondary Subject Heading:	Respiratory medicine, Public health
Keywords:	EPIDEMIOLOGY, Rheumatology < INTERNAL MEDICINE, Thoracic medicine < INTERNAL MEDICINE

SCHOLARONE™  
Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our [licence](#).

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which [Creative Commons](#) licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

1 **Air pollutants and development of interstitial lung disease in patients**  
2 **with connective tissue disease: a population-based case-control study**  
3 **in Taiwan**

4  
5 Hsin-Hua Chen<sup>1,2,3,4,5,6,7</sup>, You-Ming Yong<sup>8</sup>, Ching-Heng Lin<sup>1,9,10</sup>, Yi-Hsing Chen<sup>2,3</sup>,  
6 Der-Yuan Chen<sup>11,12,13</sup>, Jia-Ching Ying<sup>8\*</sup>, Wen-Cheng Chao<sup>14,15\*</sup>

7 <sup>1</sup>Department of Medical Research, Taichung Veterans General Hospital, Taichung,  
8 Taiwan

9 <sup>2</sup>Division of Allergy, Immunology and Rheumatology, Department of Internal  
10 Medicine, Taichung Veterans General Hospital, Taichung, Taiwan.

11 <sup>3</sup>School of Medicine, National Yang-Ming University, Taipei, Taiwan

12 <sup>4</sup>Institute of Biomedical Science and Rong Hsing Research Center for Translational  
13 Medicine, Chung Hsing University, Taichung, Taiwan

14 <sup>5</sup>Institute of Public Health and Community Medicine Research Center, National Yang  
15 Ming University, Taipei, Taiwan

16 <sup>6</sup>Department of Industrial Engineering and Enterprise Information, Tunghai  
17 University, Taichung, Taiwan

18 <sup>7</sup>Institute of Medicine, Chung Shan Medical University, Taichung, Taiwan.

19 <sup>8</sup>Department of Management Information Systems, National Chung Hsing University,  
20 Taichung, Taiwan

21 <sup>9</sup>Department of Healthcare Management, National Taipei University of Nursing and  
22 Health Sciences, Taipei, Taiwan

23 <sup>10</sup>Department of Public Health, College of Medicine, Fu Jen Catholic University, New  
24 Taipei City, Taiwan

25 <sup>11</sup>Rheumatology and Immunology Center, China Medical University Hospital,  
26 Taichung, Taiwan



27 <sup>12</sup>Translational Medicine Laboratory, Rheumatic Diseases Research Center, China

28 Medical University Hospital, Taichung, Taiwan

29 <sup>13</sup>School of Medicine, China Medical University, Taichung, Taiwan

30 <sup>14</sup>Department of Critical Care Medicine, Taichung Veterans General Hospital,

31 Taichung, Taiwan

32 <sup>15</sup>Department of Computer Science, Tunghai University, Taichung, Taiwan

33 \*Correspondence and requests for materials should be addressed to Dr Jia-Ching Ying

34 and Dr Wen-Cheng Chao

35 E-mail: [jcying@nchu.edu.tw](mailto:jcying@nchu.edu.tw) and [cwc081@hotmail.com](mailto:cwc081@hotmail.com)

36 **Running title: Air pollutants and CTD-ILD**

1 **37 Abstract**

2  
3 **38 Objective:**

4  
5  
6 **39** The aim of this study was to assess the association between air pollutant exposure and  
7  
8  
9 **40** interstitial lung disease (ILD) in patients with connective tissue diseases (CTDs).

10  
11  
12 **41 Setting:**

13  
14  
15 **42** A nationwide, population-based, matched case-control study in Taiwan

16  
17  
18 **43 Participants:**

19  
20  
21 **44** Using the 1997–2013 Taiwanese National Health Insurance Research Database, we  
22  
23  
24 **45** identified patients with newly diagnosed CTD during 2001–2013, including systemic  
25  
26  
27 **46** lupus erythematosus (SLE), rheumatoid arthritis (RA), systemic sclerosis (SSc),  
28  
29  
30 **47** dermatomyositis (DMtis)/polymyositis (PM) and primary Sjögren’s syndrome (pSS).

31  
32  
33 **48 Primary and secondary outcome measures**

34  
35  
36 **49** Patients with newly diagnosed ILD during 2012–2013 were identified as ILD cases,  
37  
38  
39 **50** and selected CTD patients without ILD matching (1:4) the CTD cases for CTD  
40  
41  
42 **51** diagnosis, age, gender, disease duration and year of ILD diagnosis date were  
43  
44  
45 **52** identified as non-ILD controls. Data of hourly level of air pollutants 1 year before the  
46  
47  
48 **53** index date were obtained from the Taiwan Environmental Protection Agency. The  
49  
50  
51 **54** association between ILD and air pollutant exposure was evaluated using logistic  
52  
53  
54 **55** regression analysis shown as adjusted odds ratios (aORs) with 95% confidence  
55  
56  
57 **56** intervals (CIs) after adjusting for potential confounders.  
58  
59  
60

1 57 **Results:** We identified 505 newly diagnosed CTD-ILD patients, including 82 with  
2  
3  
4 58 SLE, 210 with RA, 47 with SSc, 44 with DMtis/PM and 122 with pSS. O<sub>3</sub> exposure  
5  
6 59 (per 10 ppb) was associated with a decreased ILD risk in patients with CTD (aOR,  
7  
8  
9 60 0.51; 95% CI, 0.33–0.79) after adjusting for potential confounders.  
11  
12 61 **Conclusions:** A previously unrecognised inverse correlation was found between O<sub>3</sub>  
13  
14  
15 62 exposure and ILD in patients with RA and SSc. Further studies are warranted to  
16  
17  
18 63 explore the underlying mechanisms.  
19  
20  
21 64 **Keywords:** air pollutant, ozone, interstitial lung disease, connective tissue disease.  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## 65 **Strengths and limitations of this study**

- 66 1. This population-based study was conducted on a relatively large sample size, which  
67 can be generalised to the national level.
- 68 2. The study used two nationwide databases to address the association between  
69 exposure to air pollutants and the development of interstitial lung disease (ILD) in  
70 patients with connective tissue disease (CTD).
- 71 3. The selection bias of the present population-based study using claim data is  
72 minimal.
- 73 4. Given the nature of the secondary data, the analysis misses some crucial variables,  
74 such as disease activity and laboratory data.

## 75 **Background**

76 Interstitial lung disease (ILD) is characterised by progressive inflammation and  
77 fibrosis, and accumulating evidence has demonstrated an association between  
78 exposure to air pollutants and the development and disease course of ILD.<sup>1 2</sup>  
79 Autoimmune rheumatic diseases show a strong correlated with ILD, including  
80 connective tissue disease-associated ILD (CTD-ILD) as well as interstitial pneumonia  
81 with autoimmune features; furthermore, the development of CTD-ILD has been  
82 reported to be an important cause of morbidity and mortality in patients with CTD.<sup>3 4</sup>  
83 A recent Taiwanese study reported that exposure to air pollutants, primarily nitrogen  
84 dioxide (NO<sub>2</sub>), was associated with incident systemic lupus erythematosus (SLE).<sup>5</sup>  
85 Given that exposure to air pollutants has been implicated in ILD and CTD, there is a  
86 need to investigate the association between exposure to air pollutants and CTD-ILD.

87 Among the distinct air pollutants, ozone (O<sub>3</sub>) is generated through chemical  
88 reactions, the so-called quenching reaction, among pollutants, primary oxides of  
89 nitrogen, in the presence of sunlight.<sup>6</sup> Exposure to O<sub>3</sub> was implicated with an  
90 increased Th2 response through enhancing the type 2 ILC-associated pathway in  
91 airway cells, and Th1 response appears to be dominant in ILD.<sup>7 8</sup> Intriguingly,  
92 previous studies have reported a positive association between exposure to O<sub>3</sub> and the  
93 risk of acute exacerbation as well as poor pulmonary function in patients with  
94 idiopathic pulmonary fibrosis (IPF).<sup>9 10</sup> However, few studies have shown that O<sub>3</sub>

1 95 exposure might have an inverse correlation with incident ILDs, and the quenching  
2  
3 96 effect as well as dysregulated T cell response by O<sub>3</sub> might possibly underlie this  
4  
5  
6 97 intriguing correlation.<sup>2 11 12</sup> The aforementioned evidence indicates the complex  
7  
8  
9 98 association between exposure to air pollutants, particularly O<sub>3</sub>, and ILD. Moreover,  
10  
11  
12 99 evidence of the impacts of exposure to air pollutants on incident ILD in patients with  
13  
14  
15 100 CTD is still lacking. Therefore, there is a crucial need to address the impact of  
16  
17  
18 101 exposure to air pollutants on the development of ILD among patients with CTD. The  
19  
20  
21 102 Taiwanese National Health Insurance Research Database (NHIRD) has facilitated  
22  
23  
24 103 population-based epidemiological studies. Therefore, in the present study, we aimed  
25  
26  
27 104 to conduct a population-based case-control study to explore the association between  
28  
29  
30 105 ILD development and exposure to air pollutants in patients with CTDs, including  
31  
32  
33 106 SLE, rheumatoid arthritis (RA), systemic sclerosis (SSc), dermatomyositis  
34  
35  
36 107 (DMtis)/polymyositis (PM) and primary Sjögren's syndrome (pSS), using the  
37  
38  
39 108 NHIRD.  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## 109 **METHODS**

### 110 **Ethics approval**

111 This study was approved by the Institutional Review Board of Taichung Veterans

112 General Hospital, Taiwan (IRB number: CE14149B-3). Informed consent was waived

113 as all the data used for analyses were de-identified.

### 114 **Study design**

115 This research was a nationwide, population-based, matched case-control study.

### 116 **Data source**

117 Taiwan had launched a single-payer, compulsory National Health Insurance

118 programme in 1995, with nationwide coverage of up to 99.6% of Taiwan's population

119 in 2015.<sup>13</sup> The NHIRD contains all-inclusive claims data regarding the information on

120 registration, demographic characteristics, residence, medication prescription,

121 diagnosis, examinations, procedures, surgeries, medical expenditure, outpatient

122 services, inpatient services and medication prescription. The NHIRD also registered

123 all patients with major illnesses such as CTDs and malignancies in the catastrophic

124 illness registry in case the catastrophic illness-related diagnoses were validated by two

125 independent specialists through a detailed review of patients' original medical records.

126 A catastrophic illness certificate is then issued to these patients, who are then exempt

127 from expenses for medical services. In the present study, we used multiple files,

128 including registration file, ambulatory file, inpatient file and catastrophic illness

1 129 registry file, in the NHIRD from 1997 to 2013. The accuracy of the claims data from  
2  
3  
4 130 the NHIRD has been improved by regularly auditing the original medical records. The  
5  
6  
7 131 NHIRD was managed by the National Health Research Institute and was released for  
8  
9  
10 132 research purpose after the encryption of personal information.

### 133 **Identification of patients with CTD from the entire population in Taiwan**

134 We used the 1997–2013 NHIRD to identify patients with CTDs who were registered  
135 in the catastrophic illness registry between 2001 and 2013 for newly diagnosed CTDs,  
136 including SLE (International Classification of Diseases, Ninth Revision, Clinical  
137 Modification [ICD-9-CM] code 710.0), RA (ICD-9-CM codes 714.0 and  
138 714.30–714.33), SSc (ICD-9-CM code 710.1), DMtis (ICD-9-CM code 710.3), PM  
139 (ICD-9-CM code 710.4) or pSS (ICD-9-CM code, 710.2). The date of CTD diagnosis  
140 was defined as the date of initial application for a catastrophic illness certificate for  
141 the corresponding CTD. From patients with CTD, we included those who did not  
142 have overlapping CTD diagnoses and those who did not have any ambulatory or  
143 inpatient visit with a diagnosis of ILD (ICD-9 code 515 and 516.36) or idiopathic  
144 interstitial pneumonia before the time of CTD diagnosis as the CTD cohort (Fig. 1).

### 145 **Identification of ILD cases from the CTD cohort**

146 We identified those who had a new diagnosis of ILD (ICD-9 code 515 and 516.36)  
147 after the CTD diagnosis date during 2012–2013 as ILD cases. The index date was  
148 defined as the date of first ambulatory or inpatient visit with a diagnosis of ILD.



149 **Selection of matched non-ILD controls from the CTD cohort**

150 From the CTD cohort, we randomly selected those who never had a diagnosis of ILD  
151 matching (1:4) the ILD cases for diagnosis of CTDs, sex, age ( $\pm 4$  years), disease  
152 duration ( $\pm 4$  years) and the year of index date as non-ILD controls.

153 **Measurement of exposure to air pollutants**

154 The hourly levels of air pollutants 1 year before the index date were obtained from 60  
155 air quality monitoring stations across Taiwan, and mean level of air pollutants  
156 included in the present study consisted of particulate matter  $< 2.5 \mu\text{m}$  in size (PM<sub>2.5</sub>),  
157 particulate matter  $< 10 \mu\text{m}$  in size (PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide  
158 (CO), sulphur dioxide (SO<sub>2</sub>) and ozone (O<sub>3</sub>), was used to represent the degree of air  
159 pollution.<sup>14</sup> The ambient air pollutant concentrations at each residential location were  
160 estimated using a spatio-temporal model built via a deep-learning approach.<sup>15</sup> In brief,  
161 the ambient level of air pollutants at 374 residential locations across Taiwan was  
162 estimated based on the data of three air quality monitoring stations near the location.

163 **Potential confounders**

164 The factors that may affect the association between exposure to air pollutants and  
165 incident ILD were taken into account as the confounder in the regression to estimate  
166 the impact of air pollutant on incident ILD in patients with CTD. Potential  
167 confounders that were adjusted for in the multivariable logistic regression model  
168 included age, gender, disease duration, Charlson comorbidity index (CCI) without the

1 169 chronic pulmonary disease, diagnosis with chronic obstructive pulmonary disease  
2  
3  
4 170 (COPD)/asthma, use of biological disease-modifying anti-rheumatic drugs  
5  
6  
7 171 (bDMARDs), use of conventional synthetic DMARDs (csDMARDs), use of  
8  
9  
10 172 immunosuppressants, glucocorticoid dose (average daily prednisolone equivalent  
11  
12  
13 173 dose), urbanisation level of the patient's residence and the level of payroll-related  
14  
15  
16 174 insured amount. The presence of comorbidity was defined as the presence of one or  
17  
18  
19 175 more inpatient visits or at least three ambulatory visits with a corresponding  
20  
21  
22 176 ICD-9-CM code within 1 year before the index date. The CCI revised by Deyo *et al.*  
23  
24  
25 177 was applied to analyse the general comorbid medical condition.<sup>16</sup> In Taiwan, the  
26  
27  
28 178 available bDMARDs before 31 December 2013 were anti-tumour necrosis factor  
29  
30  
31 179 (anti-TNF, including etanercept, adalimumab and golimumab), tocilizumab (TCZ)  
32  
33  
34 180 and rituximab (RTX). The csDMARDs included hydroxychloroquine (HCQ),  
35  
36  
37 181 sulphasalazine (SSZ), methotrexate (MTX) and leflunomide (LEF).  
38  
39  
40 182 Immunosuppressants included cyclophosphamide (CP), cyclosporin (CSA),  
41  
42  
43 183 azathioprine (AZA) and mycophenolate mofetil (MMF)/mycophenolic acid (MPA).  
44  
45  
46 184 Given that socioeconomic status might confound the association between air pollutant  
47  
48  
49 185 exposure and pulmonary diseases, we measured the socioeconomic status of each  
50  
51  
52 186 participant based on the urbanisation level and payroll-related insured amount.<sup>17</sup> The  
53  
54  
55 187 urbanisation level of the patient's residence was categorised into four clusters based  
56  
57  
58 188 on population density (people/km<sup>2</sup>), population ratio of elderly subjects aged >65  
59  
60

1 189 years, population ratio of subjects with educational levels of college or above,  
2  
3  
4 190 population ratio of agricultural workers and the number of physicians/100,000  
5  
6 191 subjects.<sup>18</sup> Payroll-related insured amount was transformed into categorical variable  
7  
8  
9 192 with four levels based on quantiles.  
10

### 11 193 **Statistical analyses**

12  
13  
14  
15 194 Data are represented as the number of patients (%) for categorical variables and either  
16  
17  
18 195 mean  $\pm$  standard deviation for continuous variables. Categorical variables were  
19  
20  
21 196 compared using the  $\chi^2$  test or the Fisher's exact test, and continuous variables were  
22  
23  
24 197 compared using the *t*-test. Variables were considered as candidates for inclusion in the  
25  
26  
27 198 multivariable model if the associated univariate p-value was lower than 0.20.<sup>19</sup>  
28

29  
30 199 The association between the risk of ILD development and the exposure to air  
31  
32  
33 200 pollutants was examined using a multivariable conditional logistic regression analysis  
34  
35  
36 201 after adjusting for age, gender, CCI, urbanisation level, level of payroll-related  
37  
38  
39 202 insured amount and medications for CTD and is represented as adjusted odds ratio  
40  
41  
42 203 (aOR) with 95% confidence intervals (CIs). All data were analysed using the  
43  
44  
45 204 statistical software version 9.3 (SAS Institute, Inc., Cary, NC, USA). A p-value <0.05  
46  
47  
48 205 was considered as statistically significant.  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## 206 RESULTS

### 207 Study subjects with CTDs

208 A total of 505 patients with CTD-ILD were included in this study, consisting of 82  
209 with SLE, 210 with RA, 47 with SSc, 44 with DMtis/PM and 122 with pSS. A total  
210 of 2,020 patients were selected as matched non-ILD CTD controls. As shown in  
211 Table 1, patients with CTD-ILD and the non-ILD CTD controls had similar  
212 distributions of age, gender and disease duration. Compared with the non-ILD  
213 controls, patients with ILD had a higher CCI ( $1.8 \pm 1.5$  vs  $1.4 \pm 1.4$ ,  $p < 0.01$ ), were  
214 more likely to have COPD (25.0% vs 8.0%,  $p < 0.01$ ), received a higher dose of  
215 glucocorticoid (GC) ( $5.1 \pm 8.5$  vs  $2.5 \pm 4.1$  mg/day, prednisolone equivalent dose) and  
216 were more likely to use MTX (30.5% vs 22.4%,  $p < 0.01$ ), LEF (8.7% vs 5.1%,  $p <$   
217 0.01), HCQ (61.0% vs 52.4%,  $p < 0.01$ ), CSA (5.5% vs 2.4%,  $p < 0.01$ ), AZA (13.3%  
218 vs 9.5%,  $p = 0.01$ ), CP (5.3% vs 1.5%,  $p < 0.01$ ), and anti-TNF (8.3% vs 4.7%,  $p <$   
219 0.01). The socioeconomic status, including the urbanisation level and the level of  
220 payroll-related insured amount, tended to be similar between patients with ILD and  
221 the non-ILD controls. Regarding the exposure to air pollutants, patients with ILD had  
222 a slightly lower average exposure to PM<sub>2.5</sub> ( $3.0 \pm 0.6$  vs  $3.1 \pm 0.7$   $\mu\text{g}/\text{m}^3$ ,  $p < 0.01$ ),  
223 PM<sub>10</sub> ( $5.1 \pm 1.1$  vs  $5.4 \pm 1.2$   $\mu\text{g}/\text{m}^3$ ,  $p < 0.01$ ), SO<sub>2</sub> ( $0.3 \pm 0.1$  vs  $0.4 \pm 0.1$  ppb,  $p <$   
224 0.01) and O<sub>3</sub> ( $2.7 \pm 0.3$  vs  $2.8 \pm 0.3$  ppb,  $p < 0.01$ ) (Table 1). Altogether, these data  
225 showed that patients with CTD-ILD used a higher dose of GC; had greater

1 226 proportions of using csDMARDs, immunosuppressants and anti-TNF and were  
2  
3  
4 227 exposed to lower levels of air pollutants, primarily PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> and O<sub>3</sub>, than  
5  
6  
7 228 the non-ILD controls.

9 229 **Association of the risk of ILD development with comorbidity and socioeconomic**  
10  
11  
12 230 **status**

13  
14  
15 231 As depicted in Table 2, CCI without the pulmonary disease (aOR, 1.56; 95% CI  
16  
17  
18 232 1.13–2.16) and COPD (aOR, 3.60; 95% CI 2.68–4.82) were significantly associated  
19  
20  
21 233 with a higher risk of developing ILD in patients with CTD. In subgroup analyses  
22  
23  
24 234 according to CTD, the positive association between COPD and ILD remained  
25  
26  
27 235 significant in patients with RA, SLE, pSS and DMtis/PM, but not in patients with  
28  
29  
30 236 SSc (Tables 3–5).

31  
32  
33 237 **Association between medications for CTD and the risk of ILD development**

34  
35  
36 238 As shown in Table 2, a positive association can be found between prednisolone  
37  
38  
39 239 equivalent dose (mg/day) and ILD risk (aOR 1.09, 95% CI, 1.06–1.11) in all patients  
40  
41  
42 240 with CTD. The positive association between GC dose and ILD risk remained  
43  
44  
45 241 statistically significant in all of the subgroups of CTD (Tables 3–5). Regarding the  
46  
47  
48 242 use of DMARDs, we observed a positive association of ILD risk with MTX use  
49  
50  
51 243 among all patients with CTD (Table 2). However, subgroup analyses of CTD  
52  
53  
54 244 revealed that the positive association between MTX use and ILD risk remained  
55  
56  
57 245 statistically significant only in patients with DMtis/PM (Tables 3–5).  
58  
59  
60

1       246    **Association between exposure to air pollutants and ILD development**  
2

3       247    We then evaluated the factors associated with ILD development in patients with  
4  
5  
6       248    various CTDs. Exposure to O<sub>3</sub> (aOR, 0.51; 95% CI, 0.33–0.79) was found to have an  
7  
8  
9       249    inverse association with the risk of ILD development after adjusting for potential  
10  
11  
12       250    confounders. As shown in Tables 3–5, the subgroup analyses based on CTD revealed  
13  
14  
15       251    that the protective effect of O<sub>3</sub> against ILD risk was consistently present in patients  
16  
17  
18       252    with SLE, but did not reach statistical significance in patients with the other CTDs.  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## 253 **DISCUSSION**

254 The association between O<sub>3</sub> exposure and ILD development currently remains  
255 elusive, and evidence regarding air pollutant exposure and CTD-ILD is extremely  
256 sparse despite the increasing awareness of CTD-ILD. In this population-based  
257 case-control study, we found that O<sub>3</sub> exposure was inversely associated with the  
258 development of ILD in patients with CTD after adjusting for potential confounders,  
259 including concomitant medications and socioeconomic status. The finding highlights  
260 the previously unrecognised association between exposure to air pollutants,  
261 particularly O<sub>3</sub>, and the development of CTD-ILD.

262 Although there is increasing evidence to implicate exposure to air pollutants in the  
263 development of ILD, current evidence remains elusive due to the varied definition  
264 for ILDs and the distinct air pollutants.<sup>20</sup> Rice MB *et al.* conducted a  
265 community-dwelling population-based study in Framingham and reported that higher  
266 long-term exposure to elemental carbon, an indicator of traffic pollution, was  
267 associated with the incidence and progression of interstitial lung abnormalities  
268 (ILAs); however, they found no association between average levels of PM<sub>2.5</sub> and  
269 incident ILAs.<sup>12</sup> In detail, unlike the positive association found between elemental  
270 carbon (OR 1.27, 95% CI 1.04–1.55) as well as PM<sub>2.5</sub> (OR 1.02, 95% CI 0.85–1.23)  
271 and ILAs, an inverse association was found between O<sub>3</sub> (OR 0.91, 95% CI 0.78–1.06)  
272 and ILAs. Similarly, Sack C *et al.* investigated 2,671 participants from the

1 273 Multi-Ethnic Study of Atherosclerosis (MESA) Lung study and reported that  
2  
3 274 exposure to ambient NO<sub>x</sub> was associated with a higher prevalence of ILAs, but the  
4  
5  
6 275 association was not found with exposure to PM<sub>2.5</sub> and O<sub>3</sub>.<sup>2</sup> Remarkably, consistent  
7  
8  
9 276 with our finding and the result of the study of Rice MB *et al.*, there was a significant  
10  
11  
12 277 inverse association between exposure to O<sub>3</sub> and incident ILAs (OR 0.30, 95% CI  
13  
14  
15 278 0.10–0.93) in never-smokers. Furthermore, one delicate Italian study also found the  
16  
17  
18 279 trend of the inverse association between O<sub>3</sub> exposure and the incidence rate of IPF.<sup>11</sup>  
19  
20  
21 280 These three studies and our findings in patients with CTDs found the consistent but  
22  
23  
24 281 previously unrecognised inverse association between exposure to O<sub>3</sub> and incident  
25  
26  
27 282 ILDs.

28 29  
30 283 Studies have postulated that the quenching effect of O<sub>3</sub> could possibly be  
31  
32  
33 284 responsible for the inverse association between exposure to O<sub>3</sub> and incident ILDs.<sup>2 12</sup>  
34  
35  
36 285 In fact, ground-level O<sub>3</sub> is a secondary pollutant resulting from the photochemical  
37  
38  
39 286 reaction among traffic-related air pollutants, including NO<sub>2</sub> and volatile organic  
40  
41  
42 287 compounds.<sup>6</sup> A number of previous studies reported an inverse correlation between  
43  
44  
45 288 O<sub>3</sub> level and traffic-related air pollutants, including NO<sub>2</sub> and elemental carbon.<sup>2 11 12</sup>  
46  
47  
48 289 However, some studies have reported that exposure to O<sub>3</sub> and other air pollutants  
49  
50  
51 290 was positively associated with a deteriorated disease course in patients with ILD,  
52  
53  
54 291 including hospitalisation, poor lung function and exacerbation of ILD.<sup>9 10 21</sup> The  
55  
56  
57 292 aforementioned discordant findings with regard to the impact of O<sub>3</sub> exposure on  
58  
59  
60



1 293 ILDs reflect the complexity of ILD pathogenesis, which consists of initial insults  
2  
3  
4 294 resulting in the influx of inflammatory cells as well as alveolar epithelial damage and  
5  
6  
7 295 the subsequent deterioration caused by the recruitment and activation of pulmonary  
8  
9  
10 296 fibroblasts and myofibroblasts.<sup>22</sup> Therefore, we postulate that O<sub>3</sub> exposure may exert  
11  
12  
13 297 distinct effects, including the quenching effect, on the development and clinical  
14  
15  
16 298 deterioration of ILD, and the present study further provides evidence regarding the  
17  
18  
19 299 impact of O<sub>3</sub> exposure on the development of CTD-ILD.

20  
21 300 The pathogenesis of CTD-ILD has been increasingly investigated in recent years,  
22  
23  
24 301 and the balance among T cells, including innate lymphoid cells (ILCs), has been  
25  
26  
27 302 identified to play an important role in the pathogenesis of CTD-ILD.<sup>23-25</sup> Sando S. *et*  
28  
29  
30 303 *al.*, using Zym-treated SKG mice to simulate RA-ILD, observed an increase in  
31  
32  
33 304 pathogenic Th17 cells in the inflamed lung tissue of RA-ILD mice and that  
34  
35  
36 305 tofacitinib ameliorated the interstitial lung disease.<sup>26</sup> In another recent study, which  
37  
38  
39 306 analysed the cytokine profiles of 40 patients with PM/DMtis-ILD, Th1 cells were  
40  
41  
42 307 found to play a key role in the pathogenesis of PM/DM-ILD.<sup>27</sup> Intriguingly, O<sub>3</sub> has  
43  
44  
45 308 been implicated in a high Th2 response in airway cells by enhancing the type 2  
46  
47  
48 309 ILC-associated pathway.<sup>7,28</sup> Therefore, the O<sub>3</sub>-associated expansion of the Th2  
49  
50  
51 310 pathway through ILCs may at least partly explain the potential protective effects of  
52  
53  
54 311 O<sub>3</sub> on the development of ILD in patients with CTD by ameliorating  
55  
56  
57 312 Th17/Th1-associated signalling in the airway.  
58  
59  
60

1 313 Intriguingly, smoking was reported to affect the association between O<sub>3</sub> exposure  
2  
3 314 and pulmonary diseases, including ILDs.<sup>2</sup> Sack C *et al.* observed that O<sub>3</sub> exerted a  
4  
5  
6 315 protective role in incident ILAs in never-smokers (OR 0.30, 95% CI 0.10–0.93)  
7  
8  
9 316 among participants in the MESA Lung study, whereas O<sub>3</sub> tended to be a risk factor  
10  
11  
12 317 for ILAs in ever-smokers (OR 1.44, 95% CI 0.52–4.01).<sup>2</sup> Smoking status is not  
13  
14  
15 318 recorded in the NHIRD; however, the majority of enrolled patients with CTD were  
16  
17  
18 319 females (74.9%), and there is a marked low prevalence of tobacco use among  
19  
20  
21 320 females in Taiwan (2.6%). Thus, we believe that the magnitude of the protective  
22  
23  
24 321 effect of O<sub>3</sub> against the development of CTD-ILD might at least partly be attributed  
25  
26  
27 322 by the high proportion of females in the study population.<sup>29</sup>

30 323 There are some limitations in the present study. First, the NHIRD cannot provide  
31  
32  
33 324 laboratory data including titers of autoantibody; however, the medication data are  
34  
35  
36 325 comprehensive. In addition, the diagnoses of SLE, RA and SS were validated by at  
37  
38  
39 326 least two experienced and qualified rheumatologists by reviewing patients' medical  
40  
41  
42 327 charts, laboratory findings and images to issue a catastrophic illness certificate.  
43  
44  
45 328 Similarly, the accuracy of ILD in the claim is also a concern. One recently published  
46  
47  
48 329 study aimed to validate claims-based algorithms for identification of ILD in patients  
49  
50  
51 330 with RA found that the accuracy of RA-ILD was high if the diagnosis was made by  
52  
53  
54 331 specialists.<sup>30</sup> In the present study, we merely enrolled patients within the  
55  
56  
57 332 aforementioned catastrophic illness registry file. Therefore, the diagnoses of CTD  
58  
59  
60

1 333 and ILD were made by the rheumatologist, and the risk for misclassification should  
2  
3 334 be at least partly mitigated. Second, the disease activity of CTD is not recorded, but  
4  
5  
6 335 we believe that we have adjusted for the essential CTD-associated medications,  
7  
8  
9 336 which were comprehensively in NHIRD. We think the adjustment of medications  
10  
11  
12 337 should largely reflect the disease activity. Third, varied mechanisms may underlie  
13  
14  
15 338 distinct CTDs; however, patients with distinct CTDs might have similar profibrotic  
16  
17  
18 339 pathways in the development of ILD.<sup>31</sup> Fourth, given the case-control design we  
19  
20  
21 340 merely claim the association, instead of causal inference, between exposure to air  
22  
23  
24 341 pollutants and incident ILDs in patients with CTD. Furthermore, we have conducted  
25  
26  
27 342 further analyses using a longer period (2-year) of air pollutant exposure, and the  
28  
29  
30 343 results were consistent with the finding in the present study using 1-year exposure to  
31  
32  
33 344 air pollutants (Supplemental Table 1).

345 In conclusion, exposure to air pollutants is increasingly found to be associated  
36  
37  
38  
39 346 with the development of a number of pulmonary diseases, including ILDs.  
40  
41  
42 347 Recent evidence has demonstrated that O<sub>3</sub> exposure appeared to have a negative  
43  
44  
45 348 association with the development of ILDs. In the present population-based  
46  
47  
48 349 case-control study, we found that exposure to O<sub>3</sub> was inversely associated with  
49  
50  
51 350 incident CTD-ILDs among patients with CTD in Taiwan. Further studies are  
52  
53  
54 351 warranted to validate these findings and explore the underlying mechanisms.  
55  
56  
57  
58  
59  
60

1 **352 Authors' contributions:**

2  
3  
4 353 Conceived and designed the experiments: HHC, WCC, JCY, YHC and DYC.

5  
6  
7 354 Acquired data: YMY, CHL, JCY and HHC. Contributed materials/analysis tools:

8  
9  
10 355 WCC, YMY, JCY and HHC. Wrote the paper: HHC, JCY and WCC.

11  
12 **356 Funding:**

13  
14  
15 357 Funding This study was supported in part by grants from Veterans General

16  
17  
18 358 Hospitals and the University System of Taiwan Joint Research Program

19  
20  
21 359 (VGHUST109-V2-2-1 and VGHUST109-V2-2-3). The funders had no role in the

22  
23  
24 360 study design, data collection and analysis, decision to publish or preparation of the

25  
26  
27 361 manuscript.

28  
29  
30 **362 Competing interests:**

31  
32  
33 363 The authors have declared that no competing interests exist.

34  
35  
36 **364 Ethics approval**

37  
38  
39 365 This study was approved by the Institutional Review Board of Taichung Veterans

40  
41  
42 366 General Hospital, Taiwan (IRB number: CE14149B-3).

43  
44  
45 **367 Patient and Public Involvement**

46  
47  
48 368 This research was performed without patient involvement. Patients were not invited

49  
50  
51 369 with regards to design of study, measurement of outcome, and interpretation of

52  
53  
54 370 results.

55  
56  
57 **371 Data sharing statement**

372 All of the data and materials are provided in the manuscript.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

For peer review only

374 **Figure legend**

375 **Figure 1. Flowchart of subject enrolment**

For peer review only

377 **REFERENCES**

- 378 1. Araki T, Putman RK, Hatabu H, et al. Development and Progression of Interstitial  
379 Lung Abnormalities in the Framingham Heart Study. *Am J Respir Crit Care Med*  
380 2016;194:1514-22.
- 381 2. Sack C, Vedal S, Sheppard L, et al. Air pollution and subclinical interstitial lung  
382 disease: the Multi-Ethnic Study of Atherosclerosis (MESA) air-lung study. *The*  
383 *European respiratory journal* 2017;50:1700559.
- 384 3. Wilfong EM, Lentz RJ, Guttentag A, et al. Interstitial Pneumonia With  
385 Autoimmune Features: An Emerging Challenge at the Intersection of  
386 Rheumatology and Pulmonology. *Arthritis Rheumatol* 2018;70:1901-13.
- 387 4. Fischer A, du Bois R. Interstitial lung disease in connective tissue disorders. *Lancet*  
388 2012;380:689-98.
- 389 5. Tang KT, Tsuang BJ, Ku KC, et al. Relationship between exposure to air pollutants  
390 and development of systemic autoimmune rheumatic diseases: a nationwide  
391 population-based case-control study. *Ann Rheum Dis* 2019;78:1288-91.
- 392 6. Brunekreef B, Holgate ST. Air pollution and health. *Lancet* 2002;360:1233-42.
- 393 7. Kumagai K, Lewandowski R, Jackson-Humbles DN, et al. Ozone-Induced Nasal  
394 Type 2 Immunity in Mice Is Dependent on Innate Lymphoid Cells. *Am J Respir*  
395 *Cell Mol Biol* 2016;54:782-91.
- 396 8. Sumida A, Hasegawa Y, Okamoto M, et al. TH1/TH2 immune response in lung  
397 fibroblasts in interstitial lung disease. *Arch Med Res* 2008;39:503-10.
- 398 9. Johannson KA, Vittinghoff E, Lee K, et al. Acute exacerbation of idiopathic  
399 pulmonary fibrosis associated with air pollution exposure. *The European*  
400 *respiratory journal* 2014;43:1124-31.
- 401 10. Johannson KA, Vittinghoff E, Morisset J, et al. Air Pollution Exposure Is  
402 Associated With Lower Lung Function, but Not Changes in Lung Function, in  
403 Patients With Idiopathic Pulmonary Fibrosis. *Chest* 2018;154:119-25.
- 404 11. Conti S, Harari S, Caminati A, et al. The association between air pollution and the  
405 incidence of idiopathic pulmonary fibrosis in Northern Italy. *The European*  
406 *respiratory journal* 2018;51:1700397.
- 407 12. Rice MB, Li W, Schwartz J, et al. Ambient air pollution exposure and risk and  
408 progression of interstitial lung abnormalities: the Framingham Heart Study. *Thorax*  
409 2019;74:1063-69.
- 410 13. The National Health Insurance Statistics 2015: National Health Insurance  
411 Administration, Ministry of Health and Welfare, Taiwan.
- 412 14. Environmental Protection Administration T. Taiwan Air Quality Monitoring Net  
413 work. <https://taqm.epa.gov.tw/taqm/en/b0201.aspx> [Accessed in 10 October. 2019]
- 414 15. Qi Y, Li Q, Karimian H, et al. A hybrid model for spatiotemporal forecasting of  
415 PM2.5 based on graph convolutional neural network and long short-term memory.  
416 *Sci Total Environ* 2019;664:1-10.

- 417 16. Deyo RA, Cherkin DC, Ciol MA. Adapting a clinical comorbidity index for use  
418 with ICD-9-CM administrative databases. *Journal of clinical epidemiology*  
419 1992;45:613-9.
- 420 17. Kloog I, Ridgway B, Koutrakis P, et al. Long- and short-term exposure to PM2.5  
421 and mortality: using novel exposure models. *Epidemiology* 2013;24:555-61.
- 422 18. Chen BY, Chen CH, Chuang YC, et al. Changes in the relationship between  
423 childhood asthma and ambient air pollution in Taiwan: Results from a nationwide  
424 survey repeated 5 years apart. *Pediatr Allergy Immunol* 2019;30:188-94.
- 425 19. Bursac Z, Gauss CH, Williams DK, et al. Purposeful selection of variables in  
426 logistic regression. *Source Code Biol Med* 2008;3:17.
- 427 20. Johannson KA, Balmes JR, Collard HR. Air pollution exposure: a novel  
428 environmental risk factor for interstitial lung disease? *Chest* 2015;147:1161-67.
- 429 21. Sese L, Nunes H, Cottin V, et al. Role of atmospheric pollution on the natural  
430 history of idiopathic pulmonary fibrosis. *Thorax* 2018;73:145-50.
- 431 22. Hoyles RK, Derrett-Smith EC, Khan K, et al. An essential role for resident  
432 fibroblasts in experimental lung fibrosis is defined by lineage-specific deletion of  
433 high-affinity type II transforming growth factor beta receptor. *Am J Respir Crit*  
434 *Care Med* 2011;183:249-61.
- 435 23. Mi S, Li Z, Yang HZ, et al. Blocking IL-17A promotes the resolution of  
436 pulmonary inflammation and fibrosis via TGF-beta1-dependent and -independent  
437 mechanisms. *J Immunol* 2011;187:3003-14.
- 438 24. Desai O, Winkler J, Minasyan M, et al. The Role of Immune and Inflammatory  
439 Cells in Idiopathic Pulmonary Fibrosis. *Front Med (Lausanne)* 2018;5:43.
- 440 25. Castellanos JG, Longman RS. The balance of power: innate lymphoid cells in  
441 tissue inflammation and repair. *J Clin Invest* 2019;129:2640-50.
- 442 26. Sendo S, Saegusa J, Yamada H, et al. Tofacitinib facilitates the expansion of  
443 myeloid-derived suppressor cells and ameliorates interstitial lung disease in SKG  
444 mice. *Arthritis Res Ther* 2019;21:184.
- 445 27. Matsuda S, Kotani T, Ishida T, et al. Exploration of pathomechanism using  
446 comprehensive analysis of serum cytokines in  
447 polymyositis/dermatomyositis-interstitial lung disease. *Rheumatology (Oxford)*  
448 2020;59:310-18.
- 449 28. Flayer CH, Larson ED, Joseph A, et al. Ozone-induced enhancement of airway  
450 hyperreactivity in rhesus macaques: Effects of antioxidant treatment. *J Allergy Clin*  
451 *Immunol* 2020;145:312-23.
- 452 29. Taiwan tobacco control annual report 2018. Health Promotion Administration,  
453 Ministry of Health and Welfare, Taiwan.  
454 <https://health99.hpa.gov.tw/media/public/pdf/22077.pdf> [Accessed in 10 October.  
455 2019].
- 456 30. Cho SK, Doyle TJ, Lee H, et al. Validation of claims-based algorithms to identify  
457 interstitial lung disease in patients with rheumatoid arthritis. *Semin Arthritis Rheum*



458 2020;50:592-97.

1 459 31. Castelino FV, Varga J. Interstitial lung disease in connective tissue diseases:  
2  
3 460 evolving concepts of pathogenesis and management. *Arthritis Res Ther*  
4 461 2010;12:213.  
5  
6 462  
7  
8 463  
9

For peer review only

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

**Table 1. Characteristics of enrolled subjects with ILDs and matched non-ILD controls**

Variable	Non-ILD (n = 2,020)	ILD (n = 505)	p value
<b>Basic data</b>			
Age, years	59.4±14.0	60.1±14.7	0.30
Gender, female	1,520 (75.2)	380 (75.2)	1.00
Disease duration, years	6.9±5.1	6.7±5.7	0.45
CCI	1.4±1.4	1.8±1.5	<0.01
CCI without pulmonary disease	1.3±1.5	1.5±1.4	0.01
COPD	161 (8.0)	126 (25.0)	<0.01
Asthma	25 (1.2)	12 (2.4)	0.06
<b>Urbanisation</b>			
Level 1	588 (29.1)	165 (32.7)	0.48
Level 2	634 (31.4)	152 (30.1)	
Level 3	317 (15.7)	74 (14.7)	
Level 4	481 (23.8)	114 (22.6)	
<b>Payroll-related insured amount, NTD</b>			
≤15,840	615 (30.4)	160 (31.7)	0.94
15,841–20,100	393 (19.5)	96 (19.0)	
20,100–27,600	523 (25.9)	126 (25.0)	
≥27,600	489 (24.2)	123 (24.4)	
<b>Medication</b>			
<b>csDMARDs</b>			
Methotrexate	452 (22.4)	154 (30.5)	<0.01
Sulphasalazine	369 (18.3)	105 (20.8)	0.19
Leflunomide	103 (5.1)	44 (8.7)	<0.01
Hydroxychloroquine	1,058 (52.4)	308 (61.0)	<0.01
Cyclosporin	49 (2.4)	28 (5.5)	<0.01
Azathioprine	191 (9.5)	67 (13.3)	0.01
Cyclophosphamide	31 (1.5)	27 (5.3)	<0.01
Mycophenolate mofetil	20 (1.0)	6 (1.2)	0.69
Glucocorticoid	1,284 (63.6)	408 (80.8)	<0.01
Prednisolone equivalent, mg/day	2.5±4.1	5.1±8.5	<0.01
<b>bDMARDs</b>			
<b>Anti-TNF</b>			
Etanercept	95 (4.7)	42 (8.3)	<0.01
Adalimumab	57 (2.8)	25 (5.0)	0.02
Golimumab	36 (1.8)	18 (3.6)	0.01
Golimumab	3 (0.1)	0 (0.0)	0.39
Tocilizumab	1 (0.05)	2 (0.4)	0.04
Rituximab	16 (0.8)	10 (2.0)	0.02

**Air pollutant levels**

1	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	3.1 $\pm$ 0.7	3.0 $\pm$ 0.6	<0.01
2				
3	PM10 ( $\mu\text{g}/\text{m}^3$ )	5.4 $\pm$ 1.2	5.1 $\pm$ 1.1	<0.01
4	SO <sub>2</sub> (ppb)	0.4 $\pm$ 0.1	0.3 $\pm$ 0.1	<0.01
5				
6	NO <sub>2</sub> (ppb)	1.8 $\pm$ 0.6	1.8 $\pm$ 0.5	0.71
7	CO (ppm)	0.5 $\pm$ 0.2	0.6 $\pm$ 0.2	0.42
8				
9	O <sub>3</sub> (ppb)	2.8 $\pm$ 0.3	2.7 $\pm$ 0.3	<0.01

Data are presented as mean  $\pm$  standard deviation and N (%). \*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; DMARDs, disease-modifying anti-rheumatic drugs; MMF, mycophenolate mofetil; MPA, mycophenolic acid; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5  $\mu\text{m}$ ; PM10, particulate matter <10  $\mu\text{m}$ ; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

466

For peer review only

468

469 **Table 2. Crude and adjusted odds ratios for the association between ILD**  
 470 **and variables in patients with CTD**

	OR (95% CI)	aOR (95% CI)
<b>Comorbidity</b>		
CCI without pulmonary disease	2.04 (1.52–2.74)	1.56 (1.13–2.16)
COPD	4.21 (3.19–5.55)	3.60 (2.68–4.82)
<b>Urbanisation</b>		
Level 1	Reference	
Level 2	0.86 (0.67–1.09)	
Level 3	0.83 (0.61–1.13)	
Level 4	0.85 (0.65–1.10)	
<b>Payroll-related insured amount, NTD</b>		
≤15,840	Reference	
15,841–20,100	0.94 (0.70–1.25)	
20,100–27,600	0.92 (0.71–1.21)	
≥27,600	0.96 (0.71–1.30)	
<b>Medication</b>		
Methotrexate	1.75 (1.35–2.25)	1.41 (1.06–1.89)
Sulphasalazine	1.22 (0.93–1.61)	0.84 (0.62–1.14)
Leflunomide	1.85 (1.26–2.72)	1.47 (0.96–2.25)
Hydroxychloroquine	1.47 (1.19–1.80)	1.18 (0.93–1.48)
Immunosuppressants	2.05 (1.55–2.70)	1.35 (0.99–1.85)
Steroid*, mg/day	1.12 (1.09–1.14)	1.09 (1.06–1.11)
Anti-TNF	1.99 (1.33–2.99)	1.25 (0.79–1.97)
Tocilizumab	8.00 (0.73–88.23)	7.81 (0.56–109.85)
Rituximab	2.50 (1.14–5.51)	1.55 (0.64–3.74)
<b>Air pollutants</b>		
PM2.5 (per 10 µg/m <sup>3</sup> )	0.67 (0.58–0.78)	0.72 (0.47–1.09)
PM10 (per 10 µg/m <sup>3</sup> )	0.80 (0.74–0.88)	1.06 (0.83–1.37)
SO <sub>2</sub> (per 10 ppb)	0.19 (0.08–0.49)	0.40 (0.12–1.30)
NO <sub>2</sub> (per 10 ppb)	1.03 (0.87–1.23)	
CO (per 1 ppm)	1.19 (0.78–1.80)	
O <sub>3</sub> (per 10 ppb)	0.50 (0.35–0.71)	0.51 (0.33–0.79)

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

472

**Table 3. Crude and adjusted odds ratios for the association between the risk of ILD development and variables in patients with rheumatoid arthritis**

Variable	Univariable OR (95% CI)	Multivariable aOR (95% CI)
<b>Comorbidity</b>		
CCI without pulmonary disease	3.49 (1.67–7.30)	1.70 (0.77–3.71)
COPD	2.94 (1.98–4.36)	2.35 (1.54–3.59)
<b>Urbanisation</b>		
Level 1	Reference	
Level 2	1.06 (0.71–1.57)	
Level 3	0.87 (0.54–1.40)	
Level 4	0.88 (0.58–1.32)	
<b>Payroll-related insured amount, NTD</b>		
≤15,840	Reference	
15,841–20,100	1.10 (0.72–1.68)	
20,100–27,600	0.88 (0.59–1.30)	
≥27,600	0.95 (0.57–1.57)	
<b>Medication</b>		
Methotrexate	1.66 (1.22–2.26)	1.28 (0.91–1.82)
Sulphasalazine	1.16 (0.86–1.58)	
Leflunomide	1.94 (1.30–2.91)	1.35 (0.85–2.15)
Hydroxychloroquine	1.73 (1.25–2.38)	1.36 (0.95–1.94)
Immunosuppressants	2.68 (1.60–4.50)	1.53 (0.86–2.73)
Steroid*, mg/day	1.15 (1.10–1.21)	1.11 (1.05–1.17)
Anti-TNF	2.11 (1.39–3.21)	1.31 (0.82–2.09)
Tocilizumab	8.00 (0.73–88.23)	11.19 (0.75–166.66)
Rituximab	2.67 (1.20–5.94)	1.67 (0.69–4.02)
<b>Air pollutants</b>		
PM2.5 (per 10 µg/m <sup>3</sup> )	0.77 (0.61–0.97)	0.97 (0.50–1.89)
PM10 (per 10 µg/m <sup>3</sup> )	0.86 (0.76–0.97)	0.89 (0.62–1.29)
SO <sub>2</sub> (per 10 ppb)	0.52 (0.13–2.03)	
NO <sub>2</sub> (per 10 ppb)	0.98 (0.75–1.28)	
CO (per 1 ppm)	0.96 (0.48–1.92)	
O <sub>3</sub> (per 10 ppb)	0.70 (0.41–1.20)	0.69 (0.37–1.29)

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

**Table 4. Crude and adjusted odds ratios for the association between the risk of ILD development and variables in patients with systemic lupus erythematosus and primary Sjögren's syndrome**

Variable	Systemic lupus erythematosus		Primary Sjögren's syndrome	
	Univariable OR (95% CI)	Multivariable aOR (95% CI)	Univariable OR (95% CI)	Multivariable aOR (95% CI)
<b>Comorbidity</b>				
CCI without pulmonary disease	2.87 (0.86–9.65)	1.64 (0.40–6.66)	1.47 (0.98–2.22)	1.36 (0.87–2.14)
COPD	7.83 (3.54–17.29)	10.52 (3.97–27.89)	7.14 (3.85–13.24)	5.99 (3.04–11.78)
<b>Urbanisation</b>				
Level 1	Reference	Reference	Reference	
Level 2	0.51 (0.27–0.94)	0.69 (0.27–1.78)	0.81 (0.50–1.31)	
Level 3	0.59 (0.28–1.23)	0.79 (0.26–2.44)	1.24 (0.68–2.25)	
Level 4	0.74 (0.37–1.47)	1.81 (0.48–6.88)	0.90 (0.53–1.55)	
<b>Payroll-related insured amount, NTD</b>				
≤15,840	Reference		Reference	
15,841–28,800	0.61 (0.26–1.39)		1.18 (0.66–2.10)	
28,801–45,800	0.93 (0.46–1.88)		1.02 (0.58–1.78)	
≥45,801	1.07 (0.52–2.20)		0.86 (0.46–1.59)	
<b>Medication</b>				
Methotrexate	0.69 (0.19–2.44)		0.81 (0.29–2.26)	
Sulphasalazine	3.04 (0.99–9.26)	3.19 (0.81–12.56)	0.96 (0.41–2.25)	
Leflunomide	<0.01 (<0.01–>99)		1.33 (0.14–12.82)	

Hydroxychloroquine	1.27 (0.75–2.13)		1.26 (0.82–1.95)	
Immunosuppressants	1.47 (0.89–2.45)	1.06 (0.55–2.05)	3.39 (1.62–7.07)	1.84 (0.78–4.34)
Steroid*, mg/day	1.09 (1.05–1.14)	1.09 (1.03–1.15)	1.17 (1.09–1.25)	1.11 (1.03–1.18)
<b>Air pollutants</b>				
PM2.5 (per 10 µg/m³)	0.59 (0.41–0.86)	0.23 (0.07–0.73)	0.61 (0.44–0.84)	0.73 (0.30–1.76)
PM10 (per 10 µg/m³)	0.79 (0.64–0.98)	1.96 (0.98–3.89)	0.76 (0.63–0.91)	1.04 (0.61–1.75)
SO <sub>2</sub> (per 10 ppb)	0.13 (0.01–1.30)	0.41 (0.01–15.74)	0.08 (0.01–0.61)	0.10 (0.01–1.41)
NO <sub>2</sub> (per 10 ppb)	1.41 (0.93–2.15)	0.98 (0.15–6.57)	0.99 (0.70–1.40)	
CO (per 1 ppm)	2.45 (0.96–6.20)	0.94 (0.03–26.11)	1.34 (0.59–3.04)	
O <sub>3</sub> (per 10 ppb)	0.23 (0.09–0.58)	0.06 (0.01–0.43)	0.65 (0.31–1.34)	

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

**Table 5. Crude and adjusted odds ratios for the association between the risk of ILD development and variables in patients with systemic sclerosis and dermatomyositis/polymyositis**

Variable	Systemic sclerosis		Dermatomyositis/polymyositis	
	Univariable OR (95% CI)	Multivariable aOR (95% CI)	Univariable OR (95% CI)	Multivariable aOR (95% CI)
<b>Comorbidity</b>				
CCI without pulmonary disease	0.39 (0.11–1.46)	5.51 (1.11–27.26)	1.55 (0.68–3.54)	
COPD	0.80 (0.33–1.91)	2.80 (0.97–8.07)	4.19 (1.38–12.71)	6.73 (1.39–32.51)
<b>Urbanisation</b>				
Level 1	Reference	Reference	Reference	
Level 2	1.02 (0.47–2.20)	1.53 (0.56–4.18)	0.90 (0.39–2.08)	
Level 3	0.39 (0.11–1.46)	0.73 (0.15–3.68)	0.74 (0.26–2.13)	
Level 4	0.80 (0.33–1.91)	1.97 (0.51–7.57)	0.84 (0.31–2.27)	
<b>Payroll-related insured amount, NTD</b>				
≤15,840	Reference		Reference	Reference
15,841–28,800	1.01 (0.36–2.79)		0.36 (0.12–1.11)	0.39 (0.09–1.61)
28,801–45,800	1.19 (0.45–3.12)		0.66 (0.25–1.77)	0.32 (0.09–1.16)
≥45,801	1.14 (0.42–3.14)		0.74 (0.30–1.86)	0.24 (0.06–0.94)
<b>Medication</b>				
Methotrexate	1.00 (0.24–4.11)		5.70 (2.74–11.88)	7.55 (2.77–20.62)
Sulphasalazine	<0.01 (<0.01–>99)		12.00	2.31 (0.14–36.92)



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46

				(1.25–115.36)	
Leflunomide	2.00 (0.18–22.06)			>99(<0.01–>99)	
Hydroxychloroquine	0.87 (0.44–1.72)			2.21 (1.12–4.39)	0.95 (0.38–2.38)
Immunosuppressants	2.11 (1.01–4.44)	1.05 (0.40–2.74)		1.52 (0.79–2.95)	
Steroid*, mg/day	1.16 (1.07–1.25)	1.12 (1.02–1.23)		1.07 (1.02–1.11)	1.06 (1.004–1.12)
<b>Air pollutants</b>					
PM2.5 (per 10 µg/m <sup>3</sup> )	0.69 (0.41–1.18)	1.14 (0.27–4.73)		0.57 (0.34–0.95)	0.31 (0.05–1.80)
PM10 (per 10 µg/m <sup>3</sup> )	0.77 (0.57–1.04)	0.91 (0.35–2.35)		0.72 (0.54–0.97)	1.34 (0.47–3.79)
SO <sub>2</sub> (per 10 ppb)	0.06 (0.00–2.27)	0.12 (<0.01–16.34)		0.07 (0.00–1.99)	2.82 (0.01–574.01)
NO <sub>2</sub> (per 10 ppb)	0.95 (0.53–1.70)			0.90 (0.50–1.62)	
CO (per 1 ppm)	0.96 (0.24–3.86)			0.51 (0.11–2.43)	
O <sub>3</sub> (per 10 ppb)	0.28 (0.08–1.02)	0.16 (0.02–1.30)		0.30 (0.08–1.11)	0.36 (0.06–2.40)

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO2, sulphur dioxide; NO2, nitrogen dioxide; CO, carbon monoxide; O3, ozone.

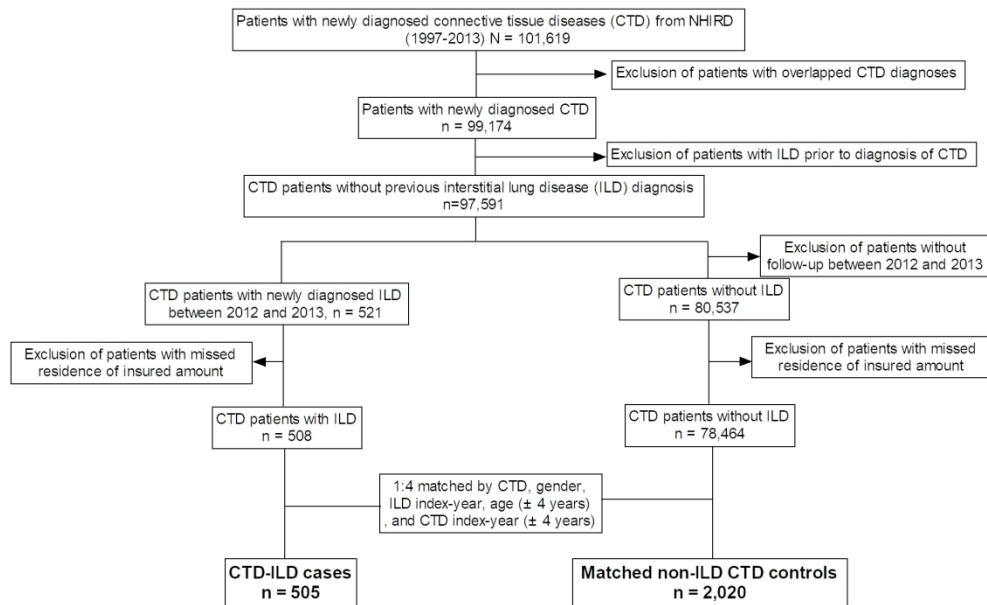


Figure 1

179x110mm (300 x 300 DPI)

**Supplemental Table 1. Crude and adjusted odds ratios for the association between ILD and variables in patients with CTD**

	OR (95% CI)	aOR (95% CI)
<b>Comorbidity</b>		
CCI without pulmonary disease	2.16 (1.42–3.30)	1.64 (1.03–2.62)
COPD	4.35 (2.92–6.48)	3.63 (2.38–5.54)
<b>Urbanisation</b>		
Level 1	Reference	
Level 2	0.89 (0.63–1.27)	
Level 3	0.80 (0.51–1.25)	
Level 4	0.88 (0.61–1.29)	
<b>Payroll-related insured amount, NTD</b>		
≤15,840	Reference	
15,841–20,100	1.15 (0.76–1.72)	
20,100–27,600	1.00 (0.69–1.46)	
≥27,600	0.94 (0.61–1.46)	
<b>Medication</b>		
Methotrexate	1.66 (1.17–2.37)	1.31 (0.87–1.96)
Sulphasalazine	1.31 (0.90–1.93)	0.86 (0.56–1.32)
Leflunomide	1.57 (0.91–2.71)	1.07 (0.57–1.99)
Hydroxychloroquine	1.59 (1.18–2.14)	1.31 (0.95–1.82)
Immunosuppressants	2.21 (1.50–3.27)	1.29 (0.83–2.01)
Steroid*, mg/day	1.13 (1.09–1.17)	1.11 (1.06–1.15)
Anti-TNF	2.10 (1.21–3.64)	1.25 (0.79–1.97)
Tocilizumab	8.00 (0.73–88.23)	1.46 (0.78–2.71)
Rituximab	2.55 (0.99–6.57)	8.11 (0.55–120.18)
<b>Air pollutants</b>		
PM2.5 (per 10 µg/m <sup>3</sup> )	0.71 (0.57–0.89)	0.71 (0.37–1.37)
PM10 (per 10 µg/m <sup>3</sup> )	0.82 (0.73–0.93)	1.10 (0.75–1.63)
SO <sub>2</sub> (per 10 ppb)	0.27 (0.08–0.94)	0.52 (0.10–2.68)
NO <sub>2</sub> (per 10 ppb)	1.04 (0.81–1.32)	
CO (per 1 ppm)	1.25 (0.69–2.26)	
O <sub>3</sub> (per 10 ppb)	0.54 (0.32–0.91)	0.47 (0.25–0.89)

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

## STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation
<b>Title and abstract</b>	1	Air pollutants and development of interstitial lung disease in patients with connective tissue disease: a population-based case-control study in Taiwan Structured abstract on page3-4
<b>Introduction</b>		
Background/rationale	2	Page 6-7
Objectives	3	Page 6, line 103-108
<b>Methods</b>		
Study design	4	Page 8, line 114-115
Setting	5	Page 8-9, line 117-132
Participants	6	Page 9-10, case group line 145-148, control line 149-152
Variables	7	Page 10-12, line 164-192
Data sources/ measurement	8*	Page 8-9, line 116-132
Bias	9	Page 10-12, line 163-192
Study size	10	Page 9, line 134-139
Quantitative variables	11	Page 10, line 153-162
Statistical methods	12	Page 12, line 193-205
<b>Results</b>		
Participants	13*	Page 13, line 208-210
Descriptive data	14*	Page 13-14, line 208-224 (table 1)
Outcome data	15*	Page 13-14, line 229-236
Main results	16	Page 14-15, line 237-252
Other analyses	17	N/A
<b>Discussion</b>		
Key results	18	Page 16, line 254-261
Limitations	19	Page 19-20, line 323-344
Interpretation	20	Page 16-19, line 262-322
Generalisability	21	Page 19, line 328-331
<b>Other information</b>		
Funding	22	Page 21, line 357-361

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at [www.strobe-statement.org](http://www.strobe-statement.org).

# BMJ Open

## Air pollutants and development of interstitial lung disease in patients with connective tissue disease: a population-based case-control study in Taiwan

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2020-041405.R2
Article Type:	Original research
Date Submitted by the Author:	26-Oct-2020
Complete List of Authors:	Chen, Hsin-Hua; Taichung Veterans General Hospital, Division of Allergy, Immunology and Rheumatology Yong, You-Ming; National Chung Hsing University, Department of Management Information Systems Lin, Ching-Heng ; Taichung Veterans General Hospital, Department of Medical Research Chen, Yi-Hsing; Taichung Veterans General Hospital, Division of Allergy, Immunology and Rheumatology Chen, Der-Yuan; China Medical University Hospital, Rheumatology and Immunology Center Ying, Jia-Ching; National Chung Hsing University, Department of Management Information Systems Chao, Wen-Cheng; Taichung Veterans General Hospital, Department of Medical Research
<b>Primary Subject Heading</b>:	Rheumatology
Secondary Subject Heading:	Respiratory medicine, Public health
Keywords:	EPIDEMIOLOGY, Rheumatology < INTERNAL MEDICINE, Thoracic medicine < INTERNAL MEDICINE

SCHOLARONE™  
Manuscripts



I, the Submitting Author has the right to grant and does grant on behalf of all authors of the Work (as defined in the below author licence), an exclusive licence and/or a non-exclusive licence for contributions from authors who are: i) UK Crown employees; ii) where BMJ has agreed a CC-BY licence shall apply, and/or iii) in accordance with the terms applicable for US Federal Government officers or employees acting as part of their official duties; on a worldwide, perpetual, irrevocable, royalty-free basis to BMJ Publishing Group Ltd ("BMJ") its licensees and where the relevant Journal is co-owned by BMJ to the co-owners of the Journal, to publish the Work in this journal and any other BMJ products and to exploit all rights, as set out in our [licence](#).

The Submitting Author accepts and understands that any supply made under these terms is made by BMJ to the Submitting Author unless you are acting as an employee on behalf of your employer or a postgraduate student of an affiliated institution which is paying any applicable article publishing charge ("APC") for Open Access articles. Where the Submitting Author wishes to make the Work available on an Open Access basis (and intends to pay the relevant APC), the terms of reuse of such Open Access shall be governed by a Creative Commons licence – details of these licences and which [Creative Commons](#) licence will apply to this Work are set out in our licence referred to above.

Other than as permitted in any relevant BMJ Author's Self Archiving Policies, I confirm this Work has not been accepted for publication elsewhere, is not being considered for publication elsewhere and does not duplicate material already published. I confirm all authors consent to publication of this Work and authorise the granting of this licence.

1 **Air pollutants and development of interstitial lung disease in patients**  
2 **with connective tissue disease: a population-based case-control study**  
3 **in Taiwan**

4  
5 Hsin-Hua Chen<sup>1,2,3,4,5,6,7</sup>, You-Ming Yong<sup>8</sup>, Ching-Heng Lin<sup>1,9,10</sup>, Yi-Hsing Chen<sup>2,3</sup>,  
6 Der-Yuan Chen<sup>11,12,13</sup>, Jia-Ching Ying<sup>8\*</sup>, Wen-Cheng Chao<sup>14,15\*</sup>

7 <sup>1</sup>Department of Medical Research, Taichung Veterans General Hospital, Taichung,  
8 Taiwan

9 <sup>2</sup>Division of Allergy, Immunology and Rheumatology, Department of Internal  
10 Medicine, Taichung Veterans General Hospital, Taichung, Taiwan.

11 <sup>3</sup>School of Medicine, National Yang-Ming University, Taipei, Taiwan

12 <sup>4</sup>Institute of Biomedical Science and Rong Hsing Research Center for Translational  
13 Medicine, Chung Hsing University, Taichung, Taiwan

14 <sup>5</sup>Institute of Public Health and Community Medicine Research Center, National Yang  
15 Ming University, Taipei, Taiwan

16 <sup>6</sup>Department of Industrial Engineering and Enterprise Information, Tunghai  
17 University, Taichung, Taiwan

18 <sup>7</sup>Institute of Medicine, Chung Shan Medical University, Taichung, Taiwan.

19 <sup>8</sup>Department of Management Information Systems, National Chung Hsing University,  
20 Taichung, Taiwan

21 <sup>9</sup>Department of Healthcare Management, National Taipei University of Nursing and  
22 Health Sciences, Taipei, Taiwan

23 <sup>10</sup>Department of Public Health, College of Medicine, Fu Jen Catholic University, New  
24 Taipei City, Taiwan

25 <sup>11</sup>Rheumatology and Immunology Center, China Medical University Hospital,  
26 Taichung, Taiwan

27 <sup>12</sup>Translational Medicine Laboratory, Rheumatic Diseases Research Center, China

28 Medical University Hospital, Taichung, Taiwan

29 <sup>13</sup>School of Medicine, China Medical University, Taichung, Taiwan

30 <sup>14</sup>Department of Critical Care Medicine, Taichung Veterans General Hospital,

31 Taichung, Taiwan

32 <sup>15</sup>Department of Computer Science, Tunghai University, Taichung, Taiwan

33 \*Correspondence and requests for materials should be addressed to Dr Jia-Ching Ying

34 and Dr Wen-Cheng Chao

35 E-mail: [jcying@nchu.edu.tw](mailto:jcying@nchu.edu.tw) and [cwc081@hotmail.com](mailto:cwc081@hotmail.com)

36 **Running title: Air pollutants and CTD-ILD**



1 **37 Abstract**

2  
3 **38 Objective:**

4  
5  
6 **39** The aim of this study was to assess the association between air pollutant exposure and  
7  
8  
9 **40** interstitial lung disease (ILD) in patients with connective tissue diseases (CTDs).

10  
11  
12 **41 Setting:**

13  
14  
15 **42** A nationwide, population-based, matched case-control study in Taiwan

16  
17  
18 **43 Participants:**

19  
20  
21 **44** Using the 1997–2013 Taiwanese National Health Insurance Research Database, we  
22  
23  
24 **45** identified patients with newly diagnosed CTD during 2001–2013, including systemic  
25  
26  
27 **46** lupus erythematosus (SLE), rheumatoid arthritis (RA), systemic sclerosis (SSc),  
28  
29  
30 **47** dermatomyositis (DMtis)/polymyositis (PM) and primary Sjögren’s syndrome (pSS).

31  
32  
33 **48 Primary and secondary outcome measures**

34  
35  
36 **49** Patients with newly diagnosed ILD during 2012–2013 were identified as ILD cases,  
37  
38  
39 **50** and selected CTD patients without ILD matching (1:4) the CTD cases for CTD  
40  
41  
42 **51** diagnosis, age, gender, disease duration and year of ILD diagnosis date were  
43  
44  
45 **52** identified as non-ILD controls. Data of hourly level of air pollutants 1 year before the  
46  
47  
48 **53** index date were obtained from the Taiwan Environmental Protection Agency. The  
49  
50  
51 **54** association between ILD and air pollutant exposure was evaluated using logistic  
52  
53  
54 **55** regression analysis shown as adjusted odds ratios (aORs) with 95% confidence  
55  
56  
57 **56** intervals (CIs) after adjusting for potential confounders.  
58  
59  
60

1 57 **Results:** We identified 505 newly diagnosed CTD-ILD patients, including 82 with  
2  
3  
4 58 SLE, 210 with RA, 47 with SSc, 44 with DMtis/PM and 122 with pSS. O<sub>3</sub> exposure  
5  
6 59 (per 10 ppb) was associated with a decreased ILD risk in patients with CTD (aOR,  
7  
8  
9 60 0.51; 95% CI, 0.33–0.79) after adjusting for potential confounders.  
11  
12 61 **Conclusions:** A previously unrecognised inverse correlation was found between O<sub>3</sub>  
13  
14  
15 62 exposure and ILD in patients with RA and SSc. Further studies are warranted to  
16  
17  
18 63 explore the underlying mechanisms.  
19  
20  
21 64 **Keywords:** air pollutant, ozone, interstitial lung disease, connective tissue disease.  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## 65 **Strengths and limitations of this study**

- 66 1. This population-based study was conducted on a relatively large sample size, which  
67 can be generalised to the national level.
- 68 2. The study used two nationwide databases to address the association between  
69 exposure to air pollutants and the development of interstitial lung disease (ILD) in  
70 patients with connective tissue disease (CTD).
- 71 3. The selection bias of the present population-based study using claim data is  
72 minimal.
- 73 4. Given the nature of the secondary data, the analysis misses some crucial variables,  
74 such as disease activity and laboratory data.

## 75 **Background**

76 Interstitial lung disease (ILD) is characterised by progressive inflammation and  
77 fibrosis, and accumulating evidence has demonstrated an association between  
78 exposure to air pollutants and the development and disease course of ILD.<sup>1 2</sup>  
79 Autoimmune rheumatic diseases show a strong correlated with ILD, including  
80 connective tissue disease-associated ILD (CTD-ILD) as well as interstitial pneumonia  
81 with autoimmune features; furthermore, the development of CTD-ILD has been  
82 reported to be an important cause of morbidity and mortality in patients with CTD.<sup>3 4</sup>  
83 A recent Taiwanese study reported that exposure to air pollutants, primarily nitrogen  
84 dioxide (NO<sub>2</sub>), was associated with incident systemic lupus erythematosus (SLE).<sup>5</sup>  
85 Given that exposure to air pollutants has been implicated in ILD and CTD, there is a  
86 need to investigate the association between exposure to air pollutants and CTD-ILD.

87 Among the distinct air pollutants, ozone (O<sub>3</sub>) is generated through chemical  
88 reactions, the so-called quenching reaction, among pollutants, primary oxides of  
89 nitrogen, in the presence of sunlight.<sup>6</sup> Exposure to O<sub>3</sub> was implicated with an  
90 increased Th2 response through enhancing the type 2 innate lymphoid cell  
91 (ILC)-associated pathway in airway cells, and Th1 response appears to be dominant  
92 in ILD.<sup>7 8</sup> Intriguingly, previous studies have reported a positive association between  
93 exposure to O<sub>3</sub> and the risk of acute exacerbation as well as poor pulmonary function  
94 in patients with idiopathic pulmonary fibrosis (IPF).<sup>9 10</sup> However, few studies have

1 95 shown that O<sub>3</sub> exposure might have an inverse correlation with incident ILDs, and  
2  
3  
4 96 the quenching effect as well as dysregulated T cell response by O<sub>3</sub> might possibly  
5  
6 97 underlie this intriguing correlation.<sup>2 11 12</sup> The aforementioned evidence indicates the  
7  
8  
9 98 complex association between exposure to air pollutants, particularly O<sub>3</sub>, and ILD.  
10  
11  
12 99 Moreover, evidence of the impacts of exposure to air pollutants on incident ILD in  
13  
14  
15 100 patients with CTD is still lacking. Therefore, there is a crucial need to address the  
16  
17  
18 101 impact of exposure to air pollutants on the development of ILD among patients with  
19  
20  
21 102 CTD. The Taiwanese National Health Insurance Research Database (NHIRD) has  
22  
23  
24 103 facilitated population-based epidemiological studies. Therefore, in the present study,  
25  
26  
27 104 we aimed to conduct a population-based case-control study to explore the association  
28  
29  
30 105 between ILD development and exposure to air pollutants in patients with CTDs,  
31  
32  
33 106 including SLE, rheumatoid arthritis (RA), systemic sclerosis (SSc), dermatomyositis  
34  
35  
36 107 (DMtis)/polymyositis (PM) and primary Sjögren's syndrome (pSS), using the  
37  
38  
39 108 NHIRD.  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## 109 **METHODS**

### 110 **Ethics approval**

111 This study was approved by the Institutional Review Board of Taichung Veterans  
112 General Hospital, Taiwan (IRB number: CE14149B-3). Informed consent was waived  
113 as all the data used for analyses were de-identified.

### 114 **Study design**

115 This research was a nationwide, population-based, matched case-control study.

### 116 **Data source**

117 Taiwan had launched a single-payer, compulsory National Health Insurance  
118 programme in 1995, with nationwide coverage of up to 99.6% of Taiwan's population  
119 in 2015.<sup>13</sup> The NHIRD contains all-inclusive claims data regarding the information on  
120 registration, demographic characteristics, residence, medication prescription,  
121 diagnosis, examinations, procedures, surgeries, medical expenditure, outpatient  
122 services, inpatient services and medication prescription. The NHIRD also registered  
123 all patients with major illnesses such as CTDs and malignancies in the catastrophic  
124 illness registry in case the catastrophic illness-related diagnoses were validated by two  
125 independent specialists through a detailed review of patients' original medical records.  
126 A catastrophic illness certificate is then issued to these patients, who are then exempt  
127 from expenses for medical services. In the present study, we used multiple files,  
128 including registration file, ambulatory file, inpatient file and catastrophic illness

1 129 registry file, in the NHIRD from 1997 to 2013. The accuracy of the claims data from  
2  
3  
4 130 the NHIRD has been improved by regularly auditing the original medical records. The  
5  
6  
7 131 NHIRD was managed by the National Health Research Institute and was released for  
8  
9  
10 132 research purpose after the encryption of personal information.

### 133 **Identification of patients with CTD from the entire population in Taiwan**

134 We used the 1997–2013 NHIRD to identify patients with CTDs who were registered  
135 in the catastrophic illness registry between 2001 and 2013 for newly diagnosed CTDs,  
136 including SLE (International Classification of Diseases, Ninth Revision, Clinical  
137 Modification [ICD-9-CM] code 710.0), RA (ICD-9-CM codes 714.0 and  
138 714.30–714.33), SSc (ICD-9-CM code 710.1), DMtis (ICD-9-CM code 710.3), PM  
139 (ICD-9-CM code 710.4) or pSS (ICD-9-CM code, 710.2). The date of CTD diagnosis  
140 was defined as the date of initial application for a catastrophic illness certificate for  
141 the corresponding CTD. From patients with CTD, we included those who did not  
142 have overlapping CTD diagnoses and those who did not have any ambulatory or  
143 inpatient visit with a diagnosis of ILD (ICD-9 code 515 and 516.36) or idiopathic  
144 interstitial pneumonia before the time of CTD diagnosis as the CTD cohort (Fig. 1).

### 145 **Identification of ILD cases from the CTD cohort**

146 We identified those who had a new diagnosis of ILD (ICD-9 code 515 and 516.36)  
147 after the CTD diagnosis date during 2012–2013 as ILD cases. The index date was  
148 defined as the date of first ambulatory or inpatient visit with a diagnosis of ILD.

**149 Selection of matched non-ILD controls from the CTD cohort**

150 From the CTD cohort, we randomly selected those who never had a diagnosis of ILD  
151 matching (1:4) the ILD cases for diagnosis of CTDs, sex, age ( $\pm 4$  years), disease  
152 duration ( $\pm 4$  years) and the year of index date as non-ILD controls.

**153 Measurement of exposure to air pollutants**

154 The hourly level of air pollutants across from 60 air quality monitoring stations were  
155 used to calculate the mean level of exposed air pollutants, including particulate matter  
156  $< 2.5 \mu\text{m}$  in size (PM<sub>2.5</sub>), particulate matter  $< 10 \mu\text{m}$  in size (PM<sub>10</sub>), nitrogen dioxide  
157 (NO<sub>2</sub>), carbon monoxide (CO), sulphur dioxide (SO<sub>2</sub>) and ozone (O<sub>3</sub>), one year prior  
158 to the index date.<sup>14</sup> The ambient air pollutant concentrations at each residential  
159 location were estimated using a spatio-temporal model built via a deep-learning  
160 approach.<sup>15</sup> In brief, we used graph convolutional neural network to estimate the level  
161 of air pollutants at each residential locations, and the ambient level of air pollutants at  
162 374 residential locations across Taiwan was estimated based on the data of three air  
163 quality monitoring stations near the location.

**164 Potential confounders**

165 The factors that may affect the association between exposure to air pollutants and  
166 incident ILD were taken into account as the confounder in the regression to estimate  
167 the impact of air pollutant on incident ILD in patients with CTD. Potential  
168 confounders that were adjusted for in the multivariable logistic regression model



1 169 included age, gender, disease duration, Charlson comorbidity index (CCI) without the  
2  
3  
4 170 chronic pulmonary disease, diagnosis with chronic obstructive pulmonary disease  
5  
6  
7 171 (COPD)/asthma, use of biological disease-modifying anti-rheumatic drugs  
8  
9  
10 172 (bDMARDs), use of conventional synthetic DMARDs (csDMARDs), use of  
11  
12  
13 173 immunosuppressants, glucocorticoid dose (average daily prednisolone equivalent  
14  
15  
16 174 dose), urbanisation level of the patient's residence and the level of payroll-related  
17  
18  
19 175 insured amount. The presence of comorbidity was defined as the presence of one or  
20  
21  
22 176 more inpatient visits or at least three ambulatory visits with a corresponding  
23  
24  
25 177 ICD-9-CM code within 1 year before the index date. The CCI revised by Deyo *et al.*  
26  
27  
28 178 was applied to analyse the general comorbid medical condition.<sup>16</sup> In Taiwan, the  
29  
30  
31 179 available bDMARDs before 31 December 2013 were anti-tumour necrosis factor  
32  
33  
34 180 (anti-TNF, including etanercept, adalimumab and golimumab), tocilizumab (TCZ)  
35  
36  
37 181 and rituximab (RTX). The csDMARDs included hydroxychloroquine (HCQ),  
38  
39  
40 182 sulphasalazine (SSZ), methotrexate (MTX) and leflunomide (LEF).  
41  
42  
43 183 Immunosuppressants included cyclophosphamide (CP), cyclosporin (CSA),  
44  
45  
46 184 azathioprine (AZA) and mycophenolate mofetil (MMF)/mycophenolic acid (MPA).  
47  
48  
49 185 Given that socioeconomic status might confound the association between air pollutant  
50  
51  
52 186 exposure and pulmonary diseases, we measured the socioeconomic status of each  
53  
54  
55 187 participant based on the urbanisation level and payroll-related insured amount.<sup>17</sup> The  
56  
57  
58 188 urbanisation level of the patient's residence was categorised into four clusters based  
59  
60

1 189 on population density (people/km<sup>2</sup>), population ratio of elderly subjects aged >65  
2  
3  
4 190 years, population ratio of subjects with educational levels of college or above,  
5  
6  
7 191 population ratio of agricultural workers and the number of physicians/100,000  
8  
9  
10 192 subjects.<sup>18</sup> Payroll-related insured amount was transformed into categorical variable  
11  
12  
13 193 with four levels based on quantiles.

#### 14 15 194 **Statistical analyses**

16  
17  
18 195 Data are represented as the number of patients (%) for categorical variables and either  
19  
20  
21 196 mean ± standard deviation for continuous variables. Categorical variables were  
22  
23  
24 197 compared using the  $\chi^2$  test or the Fisher's exact test, and continuous variables were  
25  
26  
27 198 compared using the *t*-test. Variables were considered as candidates for inclusion in the  
28  
29  
30 199 multivariable model if the associated univariate p-value was lower than 0.20.<sup>19</sup>  
31  
32  
33 200 The association between the risk of ILD development and the exposure to air  
34  
35  
36 201 pollutants was examined using a multivariable conditional logistic regression analysis  
37  
38  
39 202 after adjusting for age, gender, CCI, urbanisation level, level of payroll-related  
40  
41  
42 203 insured amount and medications for CTD and is represented as adjusted odds ratio  
43  
44  
45 204 (aOR) with 95% confidence intervals (CIs). All data were analysed using the  
46  
47  
48 205 statistical software version 9.3 (SAS Institute, Inc., Cary, NC, USA). A p-value <0.05  
49  
50  
51 206 was considered as statistically significant.

#### 52 53 54 207 **Patient and Public Involvement**

55  
56  
57 208 This research was performed without patient involvement. Patients were not invited  
58  
59  
60

1 209 with regards to design of study, measurement of outcome, and interpretation of  
2  
3  
4 210 results.  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

For peer review only

## 212 RESULTS

### 213 Study subjects with CTDs

214 A total of 505 patients with CTD-ILD were included in this study, consisting of 82  
215 with SLE, 210 with RA, 47 with SSc, 44 with DMtis/PM and 122 with pSS. A total  
216 of 2,020 patients were selected as matched non-ILD CTD controls. As shown in  
217 Table 1, patients with CTD-ILD and the non-ILD CTD controls had similar  
218 distributions of age, gender and disease duration. Compared with the non-ILD  
219 controls, patients with ILD had a higher CCI ( $1.8 \pm 1.5$  vs  $1.4 \pm 1.4$ ,  $p < 0.01$ ), were  
220 more likely to have COPD (25.0% vs 8.0%,  $p < 0.01$ ), received a higher dose of  
221 glucocorticoid (GC) ( $5.1 \pm 8.5$  vs  $2.5 \pm 4.1$  mg/day, prednisolone equivalent dose) and  
222 were more likely to use MTX (30.5% vs 22.4%,  $p < 0.01$ ), LEF (8.7% vs 5.1%,  $p <$   
223 0.01), HCQ (61.0% vs 52.4%,  $p < 0.01$ ), CSA (5.5% vs 2.4%,  $p < 0.01$ ), AZA (13.3%  
224 vs 9.5%,  $p = 0.01$ ), CP (5.3% vs 1.5%,  $p < 0.01$ ), and anti-TNF (8.3% vs 4.7%,  $p <$   
225 0.01). The socioeconomic status, including the urbanisation level and the level of  
226 payroll-related insured amount, tended to be similar between patients with ILD and  
227 the non-ILD controls. Regarding the exposure to air pollutants, patients with ILD had  
228 a slightly lower average exposure to PM<sub>2.5</sub> ( $3.0 \pm 0.6$  vs  $3.1 \pm 0.7$   $\mu\text{g}/\text{m}^3$ ,  $p < 0.01$ ),  
229 PM<sub>10</sub> ( $5.1 \pm 1.1$  vs  $5.4 \pm 1.2$   $\mu\text{g}/\text{m}^3$ ,  $p < 0.01$ ), SO<sub>2</sub> ( $0.3 \pm 0.1$  vs  $0.4 \pm 0.1$  ppb,  $p <$   
230 0.01) and O<sub>3</sub> ( $2.7 \pm 0.3$  vs  $2.8 \pm 0.3$  ppb,  $p < 0.01$ ) (Table 1). Altogether, these data  
231 showed that patients with CTD-ILD used a higher dose of GC; had greater

1 232 proportions of using csDMARDs, immunosuppressants and anti-TNF and were  
2  
3 233 exposed to lower levels of air pollutants, primarily PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> and O<sub>3</sub>, than  
4  
5  
6 234 the non-ILD controls (see details in supplemental dataset).  
7  
8

9 **235 Association of the risk of ILD development with comorbidity and socioeconomic**  
10  
11  
12 **236 status**  
13

14  
15 237 As depicted in Table 2, CCI without the pulmonary disease (aOR, 1.56; 95% CI  
16  
17  
18 238 1.13–2.16) and COPD (aOR, 3.60; 95% CI 2.68–4.82) were significantly associated  
19  
20  
21 239 with a higher risk of developing ILD in patients with CTD. In subgroup analyses  
22  
23  
24 240 according to CTD, the positive association between COPD and ILD remained  
25  
26  
27 241 significant in patients with RA, SLE, pSS and DMtis/PM, but not in patients with  
28  
29  
30 242 SSc (Tables 3–5).  
31

32  
33 **243 Association between medications for CTD and the risk of ILD development**  
34

35  
36 244 As shown in Table 2, a positive association can be found between prednisolone  
37  
38  
39 245 equivalent dose (mg/day) and ILD risk (aOR 1.09, 95% CI, 1.06–1.11) in all patients  
40  
41  
42 246 with CTD. The positive association between GC dose and ILD risk remained  
43  
44  
45 247 statistically significant in all of the subgroups of CTD (Tables 3–5). Regarding the  
46  
47  
48 248 use of DMARDs, we observed a positive association of ILD risk with MTX use  
49  
50  
51 249 among all patients with CTD (Table 2). However, subgroup analyses of CTD  
52  
53  
54 250 revealed that the positive association between MTX use and ILD risk remained  
55  
56  
57 251 statistically significant only in patients with DMtis/PM (Tables 3–5).  
58  
59  
60

1           252    **Association between exposure to air pollutants and ILD development**

2  
3           253    We then evaluated the factors associated with ILD development in patients with  
4  
5  
6           254    various CTDs. Exposure to O<sub>3</sub> (aOR, 0.51; 95% CI, 0.33–0.79) was found to have an  
7  
8  
9           255    inverse association with the risk of ILD development after adjusting for potential  
10  
11  
12          256    confounders. As shown in Tables 3–5, the subgroup analyses based on CTD revealed  
13  
14  
15          257    that the protective effect of O<sub>3</sub> against ILD risk was consistently present in patients  
16  
17  
18          258    with SLE, but did not reach statistical significance in patients with the other CTDs.  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

## 259 DISCUSSION

260 The association between O<sub>3</sub> exposure and ILD development currently remains  
261 elusive, and evidence regarding air pollutant exposure and CTD-ILD is extremely  
262 sparse despite the increasing awareness of CTD-ILD. In this population-based  
263 case-control study, we found that O<sub>3</sub> exposure was inversely associated with the  
264 development of ILD in patients with CTD after adjusting for potential confounders,  
265 including concomitant medications and socioeconomic status. The finding highlights  
266 the previously unrecognised association between exposure to air pollutants,  
267 particularly O<sub>3</sub>, and the development of CTD-ILD.

268 Although there is increasing evidence to implicate exposure to air pollutants in the  
269 development of ILD, current evidence remains elusive due to the varied definition  
270 for ILDs and the distinct air pollutants.<sup>20</sup> Rice MB *et al.* conducted a  
271 community-dwelling population-based study in Framingham and reported that higher  
272 long-term exposure to elemental carbon, an indicator of traffic pollution, was  
273 associated with the incidence and progression of interstitial lung abnormalities  
274 (ILAs); however, they found no association between average levels of PM<sub>2.5</sub> and  
275 incident ILAs.<sup>12</sup> In detail, unlike the positive association found between elemental  
276 carbon (OR 1.27, 95% CI 1.04–1.55) as well as PM<sub>2.5</sub> (OR 1.02, 95% CI 0.85–1.23)  
277 and ILAs, an inverse association was found between O<sub>3</sub> (OR 0.91, 95% CI 0.78–1.06)  
278 and ILAs. Similarly, Sack C *et al.* investigated 2,671 participants from the

1 279 Multi-Ethnic Study of Atherosclerosis (MESA) Lung study and reported that  
2  
3  
4 280 exposure to ambient NO<sub>x</sub> was associated with a higher prevalence of ILAs, but the  
5  
6 281 association was not found with exposure to PM<sub>2.5</sub> and O<sub>3</sub>.<sup>2</sup> Remarkably, consistent  
8  
9 282 with our finding and the result of the study of Rice MB *et al.*, there was a significant  
11  
12 283 inverse association between exposure to O<sub>3</sub> and incident ILAs (OR 0.30, 95% CI  
14  
15 284 0.10–0.93) in never-smokers. Furthermore, one delicate Italian study also found the  
17  
18 285 trend of the inverse association between O<sub>3</sub> exposure and the incidence rate of IPF.<sup>11</sup>  
19  
20 286 These three studies and our findings in patients with CTDs found the consistent but  
22  
23 287 previously unrecognised inverse association between exposure to O<sub>3</sub> and incident  
25  
26 288 ILDs.

29  
30 289 Studies have postulated that the quenching effect of O<sub>3</sub> could possibly be  
32  
33 290 responsible for the inverse association between exposure to O<sub>3</sub> and incident ILDs.<sup>2 11 12</sup>  
34  
35 291 In fact, ground-level O<sub>3</sub> is a secondary pollutant resulting from the photochemical  
37  
38 292 reaction among traffic-related air pollutants, including NO<sub>2</sub> and volatile organic  
40  
41 293 compounds.<sup>6</sup> A number of previous studies reported an inverse correlation between  
43  
44 294 O<sub>3</sub> level and traffic-related air pollutants, including NO<sub>2</sub> and elemental carbon.<sup>2 11 12</sup>  
46  
47 295 However, some studies have reported that exposure to O<sub>3</sub> and other air pollutants  
49  
50 296 was positively associated with a deteriorated disease course in patients with ILD,  
52  
53 297 including hospitalisation, poor lung function and exacerbation of ILD.<sup>9 10 21</sup> The  
55  
56 298 aforementioned discordant findings with regard to the impact of O<sub>3</sub> exposure on  
58  
59  
60



1 299 ILDs reflect the complexity of ILD pathogenesis, which consists of initial insults  
2  
3 300 resulting in the influx of inflammatory cells as well as alveolar epithelial damage and  
4  
5  
6 301 the subsequent deterioration caused by the recruitment and activation of pulmonary  
7  
8  
9 302 fibroblasts and myofibroblasts.<sup>22</sup> Therefore, we postulate that O<sub>3</sub> exposure may exert  
10  
11  
12 303 distinct effects, including the quenching effect, on the development and clinical  
13  
14  
15 304 deterioration of ILD, and the present study further provides evidence regarding the  
16  
17  
18 305 impact of O<sub>3</sub> exposure on the development of CTD-ILD.  
19

20  
21 306 The pathogenesis of CTD-ILD has been increasingly investigated in recent years,  
22  
23  
24 307 and the balance among T cells, including ILCs, has been identified to play an  
25  
26  
27 308 important role in the pathogenesis of CTD-ILD.<sup>23-25</sup> Sendo S. *et al.*, using  
28  
29  
30 309 Zym-treated SKG mice to simulate RA-ILD, observed an increase in pathogenic  
31  
32  
33 310 Th17 cells in the inflamed lung tissue of RA-ILD mice and that tofacitinib  
34  
35  
36 311 ameliorated the interstitial lung disease.<sup>26</sup> In another recent study, which analysed the  
37  
38  
39 312 cytokine profiles of 40 patients with PM/DMtis-ILD, Th1 cells were found to play a  
40  
41  
42 313 key role in the pathogenesis of PM/DM-ILD.<sup>27</sup> Intriguingly, O<sub>3</sub> has been implicated  
43  
44  
45 314 in a high Th2 response in airway cells by enhancing the type 2 ILC-associated  
46  
47  
48 315 pathway.<sup>7 28</sup> Therefore, the O<sub>3</sub>-associated expansion of the Th2 pathway through  
49  
50  
51 316 ILCs may at least partly explain the potential protective effects of O<sub>3</sub> on the  
52  
53  
54 317 development of ILD in patients with CTD by ameliorating Th17/Th1-associated  
55  
56  
57 318 signalling in the airway.  
58  
59  
60

1 319 Intriguingly, smoking was reported to affect the association between O<sub>3</sub> exposure  
2  
3  
4 320 and pulmonary diseases, including ILDs.<sup>2</sup> Sack C *et al.* observed that O<sub>3</sub> exerted a  
5  
6  
7 321 protective role in incident ILAs in never-smokers (OR 0.30, 95% CI 0.10–0.93)  
8  
9  
10 322 among participants in the MESA Lung study, whereas O<sub>3</sub> tended to be a risk factor  
11  
12  
13 323 for ILAs in ever-smokers (OR 1.44, 95% CI 0.52–4.01).<sup>2</sup> Smoking status is not  
14  
15  
16 324 recorded in the NHIRD; however, the majority of enrolled patients with CTD were  
17  
18  
19 325 females (74.9%), and there is a marked low prevalence of tobacco use among  
20  
21  
22 326 females in Taiwan (2.6%). Thus, we believe that the magnitude of the protective  
23  
24  
25 327 effect of O<sub>3</sub> against the development of CTD-ILD might at least partly be attributed  
26  
27  
28 328 by the high proportion of females in the study population.<sup>29</sup>

30 329 There are some limitations in the present study. First, the NHIRD cannot provide  
31  
32  
33 330 laboratory data including titers of autoantibody; however, the medication data are  
34  
35  
36 331 comprehensive. In addition, the diagnoses of SLE, RA and SS were validated by at  
37  
38  
39 332 least two experienced and qualified rheumatologists by reviewing patients' medical  
40  
41  
42 333 charts, laboratory findings and images to issue a catastrophic illness certificate.  
43  
44  
45 334 Similarly, the accuracy of ILD in the claim is also a concern. One recently published  
46  
47  
48 335 study aimed to validate claims-based algorithms for identification of ILD in patients  
49  
50  
51 336 with RA found that the accuracy of RA-ILD was high if the diagnosis was made by  
52  
53  
54 337 specialists.<sup>30</sup> In the present study, we merely enrolled patients within the  
55  
56  
57 338 aforementioned catastrophic illness registry file. Therefore, the diagnoses of CTD  
58  
59  
60

1 339 and ILD were made by the rheumatologist, and the risk for misclassification should  
2  
3 340 be at least partly mitigated. Second, the disease activity of CTD is not recorded, but  
4  
5  
6 341 we believe that we have adjusted for the essential CTD-associated medications,  
7  
8  
9 342 which were comprehensively in NHIRD. We believe the adjustment of medications  
10  
11  
12 343 should largely reflect the disease activity. Third, varied mechanisms may underlie  
13  
14  
15 344 distinct CTDs; however, patients with distinct CTDs might have similar profibrotic  
16  
17  
18 345 pathways in the development of ILD.<sup>31</sup> Fourth, given the case-control design we  
19  
20  
21 346 merely claim the association, instead of causal inference, between exposure to air  
22  
23  
24 347 pollutants and incident ILDs in patients with CTD. Furthermore, we have conducted  
25  
26  
27 348 further analyses using a longer period (2-year) of air pollutant exposure, and the  
28  
29  
30 349 results were consistent with the finding in the present study using 1-year exposure to  
31  
32  
33 350 air pollutants (Supplemental Table 1).

36 351 In conclusion, exposure to air pollutants is increasingly found to be associated  
37  
38  
39 352 with the development of a number of pulmonary diseases, including ILDs.  
40  
41  
42 353 Recent evidence has demonstrated that O<sub>3</sub> exposure appeared to have a negative  
43  
44  
45 354 association with the development of ILDs. In the present population-based  
46  
47  
48 355 case-control study, we found that exposure to O<sub>3</sub> was inversely associated with  
49  
50  
51 356 incident CTD-ILDs among patients with CTD in Taiwan. Further studies are  
52  
53  
54 357 warranted to validate these findings and explore the underlying mechanisms.  
55  
56  
57  
58  
59  
60

1           358   **Authors' contributions:**

2  
3           359   Conceived and designed the experiments: HHC, WCC, JCY, YHC and DYC.

4  
5  
6           360   Acquired data: YMY, CHL, JCY and HHC. Contributed materials/analysis tools:

7  
8  
9           361   WCC, YMY, JCY and HHC. Wrote the paper: HHC, JCY and WCC.

10  
11  
12          362   **Funding:**

13  
14  
15          363   Funding This study was supported in part by grants from Veterans General

16  
17  
18          364   Hospitals and the University System of Taiwan Joint Research Program

19  
20  
21          365   (VGHUST109-V2-2-1 and VGHUST109-V2-2-3). The funders had no role in the

22  
23  
24          366   study design, data collection and analysis, decision to publish or preparation of the

25  
26  
27          367   manuscript.

28  
29  
30          368   **Competing interests:**

31  
32  
33          369   The authors have declared that no competing interests exist.

34  
35  
36          370   **Ethics approval**

37  
38  
39          371   This study was approved by the Institutional Review Board of Taichung Veterans

40  
41  
42          372   General Hospital, Taiwan (IRB number: CE14149B-3).

43  
44  
45          373   **Data sharing statement**

46  
47  
48          374   All of the data and materials are provided in the manuscript and the supplemental

49  
50  
51          375   data.

377 **Figure legend**

378 **Figure 1. Flowchart of subject enrolment**

For peer review only

380 **REFERENCES**

- 381 1. Araki T, Putman RK, Hatabu H, et al. Development and Progression of Interstitial  
382 Lung Abnormalities in the Framingham Heart Study. *Am J Respir Crit Care Med*  
383 2016;194:1514-22.
- 384 2. Sack C, Vedal S, Sheppard L, et al. Air pollution and subclinical interstitial lung  
385 disease: the Multi-Ethnic Study of Atherosclerosis (MESA) air-lung study. *The*  
386 *European respiratory journal* 2017;50:1700559.
- 387 3. Wilfong EM, Lentz RJ, Guttentag A, et al. Interstitial Pneumonia With  
388 Autoimmune Features: An Emerging Challenge at the Intersection of  
389 Rheumatology and Pulmonology. *Arthritis Rheumatol* 2018;70:1901-13.
- 390 4. Fischer A, du Bois R. Interstitial lung disease in connective tissue disorders. *Lancet*  
391 2012;380:689-98.
- 392 5. Tang KT, Tsuang BJ, Ku KC, et al. Relationship between exposure to air pollutants  
393 and development of systemic autoimmune rheumatic diseases: a nationwide  
394 population-based case-control study. *Ann Rheum Dis* 2019;78:1288-91.
- 395 6. Brunekreef B, Holgate ST. Air pollution and health. *Lancet* 2002;360:1233-42.
- 396 7. Kumagai K, Lewandowski R, Jackson-Humbles DN, et al. Ozone-Induced Nasal  
397 Type 2 Immunity in Mice Is Dependent on Innate Lymphoid Cells. *Am J Respir*  
398 *Cell Mol Biol* 2016;54:782-91.
- 399 8. Sumida A, Hasegawa Y, Okamoto M, et al. TH1/TH2 immune response in lung  
400 fibroblasts in interstitial lung disease. *Arch Med Res* 2008;39:503-10.
- 401 9. Johannson KA, Vittinghoff E, Lee K, et al. Acute exacerbation of idiopathic  
402 pulmonary fibrosis associated with air pollution exposure. *The European*  
403 *respiratory journal* 2014;43:1124-31.
- 404 10. Johannson KA, Vittinghoff E, Morisset J, et al. Air Pollution Exposure Is  
405 Associated With Lower Lung Function, but Not Changes in Lung Function, in  
406 Patients With Idiopathic Pulmonary Fibrosis. *Chest* 2018;154:119-25.
- 407 11. Conti S, Harari S, Caminati A, et al. The association between air pollution and the  
408 incidence of idiopathic pulmonary fibrosis in Northern Italy. *The European*  
409 *respiratory journal* 2018;51:1700397.
- 410 12. Rice MB, Li W, Schwartz J, et al. Ambient air pollution exposure and risk and  
411 progression of interstitial lung abnormalities: the Framingham Heart Study. *Thorax*  
412 2019;74:1063-69.
- 413 13. The National Health Insurance Statistics 2015: National Health Insurance  
414 Administration, Ministry of Health and Welfare, Taiwan.
- 415 14. Environmental Protection Administration T. Taiwan Air Quality Monitoring Net  
416 work. <https://taqm.epa.gov.tw/taqm/en/b0201.aspx> [Accessed in 10 October. 2019]
- 417 15. Qi Y, Li Q, Karimian H, et al. A hybrid model for spatiotemporal forecasting of  
418 PM<sub>2.5</sub> based on graph convolutional neural network and long short-term memory.  
419 *Sci Total Environ* 2019;664:1-10.

- 420 16. Deyo RA, Cherkin DC, Ciol MA. Adapting a clinical comorbidity index for use  
421 with ICD-9-CM administrative databases. *Journal of clinical epidemiology*  
422 1992;45:613-9.
- 423 17. Kloog I, Ridgway B, Koutrakis P, et al. Long- and short-term exposure to PM2.5  
424 and mortality: using novel exposure models. *Epidemiology* 2013;24:555-61.
- 425 18. Chen BY, Chen CH, Chuang YC, et al. Changes in the relationship between  
426 childhood asthma and ambient air pollution in Taiwan: Results from a nationwide  
427 survey repeated 5 years apart. *Pediatr Allergy Immunol* 2019;30:188-94.
- 428 19. Bursac Z, Gauss CH, Williams DK, et al. Purposeful selection of variables in  
429 logistic regression. *Source Code Biol Med* 2008;3:17.
- 430 20. Johannson KA, Balmes JR, Collard HR. Air pollution exposure: a novel  
431 environmental risk factor for interstitial lung disease? *Chest* 2015;147:1161-67.
- 432 21. Sese L, Nunes H, Cottin V, et al. Role of atmospheric pollution on the natural  
433 history of idiopathic pulmonary fibrosis. *Thorax* 2018;73:145-50.
- 434 22. Hoyles RK, Derrett-Smith EC, Khan K, et al. An essential role for resident  
435 fibroblasts in experimental lung fibrosis is defined by lineage-specific deletion of  
436 high-affinity type II transforming growth factor beta receptor. *Am J Respir Crit*  
437 *Care Med* 2011;183:249-61.
- 438 23. Mi S, Li Z, Yang HZ, et al. Blocking IL-17A promotes the resolution of  
439 pulmonary inflammation and fibrosis via TGF-beta1-dependent and -independent  
440 mechanisms. *J Immunol* 2011;187:3003-14.
- 441 24. Desai O, Winkler J, Minasyan M, et al. The Role of Immune and Inflammatory  
442 Cells in Idiopathic Pulmonary Fibrosis. *Front Med (Lausanne)* 2018;5:43.
- 443 25. Castellanos JG, Longman RS. The balance of power: innate lymphoid cells in  
444 tissue inflammation and repair. *J Clin Invest* 2019;129:2640-50.
- 445 26. Sendo S, Saegusa J, Yamada H, et al. Tofacitinib facilitates the expansion of  
446 myeloid-derived suppressor cells and ameliorates interstitial lung disease in SKG  
447 mice. *Arthritis Res Ther* 2019;21:184.
- 448 27. Matsuda S, Kotani T, Ishida T, et al. Exploration of pathomechanism using  
449 comprehensive analysis of serum cytokines in  
450 polymyositis/dermatomyositis-interstitial lung disease. *Rheumatology (Oxford)*  
451 2020;59:310-18.
- 452 28. Flayer CH, Larson ED, Joseph A, et al. Ozone-induced enhancement of airway  
453 hyperreactivity in rhesus macaques: Effects of antioxidant treatment. *J Allergy Clin*  
454 *Immunol* 2020;145:312-23.
- 455 29. Taiwan tobacco control annual report 2018. Health Promotion Administration,  
456 Ministry of Health and Welfare, Taiwan.  
457 <https://health99.hpa.gov.tw/media/public/pdf/22077.pdf> [Accessed in 10 October.  
458 2019].
- 459 30. Cho SK, Doyle TJ, Lee H, et al. Validation of claims-based algorithms to identify  
460 interstitial lung disease in patients with rheumatoid arthritis. *Semin Arthritis Rheum*

461 2020;50:592-97.

1 462 31. Castelino FV, Varga J. Interstitial lung disease in connective tissue diseases:  
2  
3 463 evolving concepts of pathogenesis and management. *Arthritis Res Ther*  
4 464 2010;12:213.  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

For peer review only



**Table 1. Characteristics of enrolled subjects with ILDs and matched non-ILD controls**

Variable	Non-ILD (n = 2,020)	ILD (n = 505)	p value
<b>Basic data</b>			
Age, years	59.4±14.0	60.1±14.7	0.30
Gender, female	1,520 (75.2)	380 (75.2)	1.00
Disease duration, years	6.9±5.1	6.7±5.7	0.45
CCI	1.4±1.4	1.8±1.5	<0.01
CCI without pulmonary disease	1.3±1.5	1.5±1.4	0.01
COPD	161 (8.0)	126 (25.0)	<0.01
Asthma	25 (1.2)	12 (2.4)	0.06
<b>Urbanisation</b>			
Level 1	588 (29.1)	165 (32.7)	0.48
Level 2	634 (31.4)	152 (30.1)	
Level 3	317 (15.7)	74 (14.7)	
Level 4	481 (23.8)	114 (22.6)	
<b>Payroll-related insured amount, NTD</b>			
≤15,840	615 (30.4)	160 (31.7)	0.94
15,841–20,100	393 (19.5)	96 (19.0)	
20,100–27,600	523 (25.9)	126 (25.0)	
≥27,600	489 (24.2)	123 (24.4)	
<b>Medication</b>			
<b>csDMARDs</b>			
Methotrexate	452 (22.4)	154 (30.5)	<0.01
Sulphasalazine	369 (18.3)	105 (20.8)	0.19
Leflunomide	103 (5.1)	44 (8.7)	<0.01
Hydroxychloroquine	1,058 (52.4)	308 (61.0)	<0.01
Cyclosporin	49 (2.4)	28 (5.5)	<0.01
Azathioprine	191 (9.5)	67 (13.3)	0.01
Cyclophosphamide	31 (1.5)	27 (5.3)	<0.01
Mycophenolate mofetil	20 (1.0)	6 (1.2)	0.69
Glucocorticoid	1,284 (63.6)	408 (80.8)	<0.01
Prednisolone equivalent, mg/day	2.5±4.1	5.1±8.5	<0.01
<b>bDMARDs</b>			
<b>Anti-TNF</b>			
Etanercept	95 (4.7)	42 (8.3)	<0.01
Adalimumab	57 (2.8)	25 (5.0)	0.02
Adalimumab	36 (1.8)	18 (3.6)	0.01
Golimumab	3 (0.1)	0 (0.0)	0.39
Tocilizumab	1 (0.05)	2 (0.4)	0.04
Rituximab	16 (0.8)	10 (2.0)	0.02
<b>Air pollutant levels</b>			

	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	3.1 $\pm$ 0.7	3.0 $\pm$ 0.6	<0.01
1	PM10 ( $\mu\text{g}/\text{m}^3$ )	5.4 $\pm$ 1.2	5.1 $\pm$ 1.1	<0.01
2				
3	SO <sub>2</sub> (ppb)	0.4 $\pm$ 0.1	0.3 $\pm$ 0.1	<0.01
4	NO <sub>2</sub> (ppb)	1.8 $\pm$ 0.6	1.8 $\pm$ 0.5	0.71
5				
6	CO (ppm)	0.5 $\pm$ 0.2	0.6 $\pm$ 0.2	0.42
7	O <sub>3</sub> (ppb)	2.8 $\pm$ 0.3	2.7 $\pm$ 0.3	<0.01

Data are presented as mean  $\pm$  standard deviation and N (%). \*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; DMARDs, disease-modifying anti-rheumatic drugs; MMF, mycophenolate mofetil; MPA, mycophenolic acid; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5  $\mu\text{m}$ ; PM10, particulate matter <10  $\mu\text{m}$ ; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

467

For peer review only

469

470 **Table 2. Crude and adjusted odds ratios for the association between ILD**  
 471 **and variables in patients with CTD**

	OR (95% CI)	aOR (95% CI)
<b>Comorbidity</b>		
CCI without pulmonary disease	2.04 (1.52–2.74)	1.56 (1.13–2.16)**
COPD	4.21 (3.19–5.55)	3.60 (2.68–4.82)**
<b>Urbanisation</b>		
Level 1	Reference	
Level 2	0.86 (0.67–1.09)	
Level 3	0.83 (0.61–1.13)	
Level 4	0.85 (0.65–1.10)	
<b>Payroll-related insured amount, NTD</b>		
≤15,840	Reference	
15,841–20,100	0.94 (0.70–1.25)	
20,100–27,600	0.92 (0.71–1.21)	
≥27,600	0.96 (0.71–1.30)	
<b>Medication</b>		
Methotrexate	1.75 (1.35–2.25)	1.41 (1.06–1.89)*
Sulphasalazine	1.22 (0.93–1.61)	0.84 (0.62–1.14)
Leflunomide	1.85 (1.26–2.72)	1.47 (0.96–2.25)
Hydroxychloroquine	1.47 (1.19–1.80)	1.18 (0.93–1.48)
Immunosuppressants	2.05 (1.55–2.70)	1.35 (0.99–1.85)
Steroid <sup>#</sup> , mg/day	1.12 (1.09–1.14)	1.09 (1.06–1.11)**
Anti-TNF	1.99 (1.33–2.99)	1.25 (0.79–1.97)
Tocilizumab	8.00 (0.73–88.23)	7.81 (0.56–109.85)
Rituximab	2.50 (1.14–5.51)	1.55 (0.64–3.74)
<b>Air pollutants</b>		
PM2.5 (per 10 µg/m <sup>3</sup> )	0.67 (0.58–0.78)	0.72 (0.47–1.09)
PM10 (per 10 µg/m <sup>3</sup> )	0.80 (0.74–0.88)	1.06 (0.83–1.37)
SO <sub>2</sub> (per 10 ppb)	0.19 (0.08–0.49)	0.40 (0.12–1.30)
NO <sub>2</sub> (per 10 ppb)	1.03 (0.87–1.23)	
CO (per 1 ppm)	1.19 (0.78–1.80)	
O <sub>3</sub> (per 10 ppb)	0.50 (0.35–0.71)	0.51 (0.33–0.79)**

<sup>#</sup>Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone. \* p<0.05, \*\* p<0.005.

473

**Table 3. Crude and adjusted odds ratios for the association between the risk of ILD development and variables in patients with rheumatoid arthritis**

Variable	Univariable OR (95% CI)	Multivariable aOR (95% CI)
<b>Comorbidity</b>		
CCI without pulmonary disease	3.49 (1.67–7.30)	1.70 (0.77–3.71)
COPD	2.94 (1.98–4.36)	2.35 (1.54–3.59)**
<b>Urbanisation</b>		
Level 1	Reference	
Level 2	1.06 (0.71–1.57)	
Level 3	0.87 (0.54–1.40)	
Level 4	0.88 (0.58–1.32)	
<b>Payroll-related insured amount, NTD</b>		
≤15,840	Reference	
15,841–20,100	1.10 (0.72–1.68)	
20,100–27,600	0.88 (0.59–1.30)	
≥27,600	0.95 (0.57–1.57)	
<b>Medication</b>		
Methotrexate	1.66 (1.22–2.26)	1.28 (0.91–1.82)
Sulphasalazine	1.16 (0.86–1.58)	
Leflunomide	1.94 (1.30–2.91)	1.35 (0.85–2.15)
Hydroxychloroquine	1.73 (1.25–2.38)	1.36 (0.95–1.94)
Immunosuppressants	2.68 (1.60–4.50)	1.53 (0.86–2.73)
Steroid <sup>#</sup> , mg/day	1.15 (1.10–1.21)	1.11 (1.05–1.17)**
Anti-TNF	2.11 (1.39–3.21)	1.31 (0.82–2.09)
Tocilizumab	8.00 (0.73–88.23)	11.19 (0.75–166.66)
Rituximab	2.67 (1.20–5.94)	1.67 (0.69–4.02)
<b>Air pollutants</b>		
PM2.5 (per 10 µg/m <sup>3</sup> )	0.77 (0.61–0.97)	0.97 (0.50–1.89)
PM10 (per 10 µg/m <sup>3</sup> )	0.86 (0.76–0.97)	0.89 (0.62–1.29)
SO <sub>2</sub> (per 10 ppb)	0.52 (0.13–2.03)	
NO <sub>2</sub> (per 10 ppb)	0.98 (0.75–1.28)	
CO (per 1 ppm)	0.96 (0.48–1.92)	
O <sub>3</sub> (per 10 ppb)	0.70 (0.41–1.20)	0.69 (0.37–1.29)

<sup>#</sup>Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone. \* p<0.05, \*\* p<0.005.

**Table 4. Crude and adjusted odds ratios for the association between the risk of ILD development and variables in patients with systemic lupus erythematosus and primary Sjögren's syndrome**

Variable	Systemic lupus erythematosus		Primary Sjögren's syndrome	
	Univariable OR (95% CI)	Multivariable aOR (95% CI)	Univariable OR (95% CI)	Multivariable aOR (95% CI)
<b>Comorbidity</b>				
CCI without pulmonary disease	2.87 (0.86–9.65)	1.64 (0.40–6.66)	1.47 (0.98–2.22)	1.36 (0.87–2.14)
COPD	7.83 (3.54–17.29)	10.52 (3.97–27.89)**	7.14 (3.85–13.24)	5.99 (3.04–11.78)**
<b>Urbanisation</b>				
Level 1	Reference	Reference	Reference	
Level 2	0.51 (0.27–0.94)	0.69 (0.27–1.78)	0.81 (0.50–1.31)	
Level 3	0.59 (0.28–1.23)	0.79 (0.26–2.44)	1.24 (0.68–2.25)	
Level 4	0.74 (0.37–1.47)	1.81 (0.48–6.88)	0.90 (0.53–1.55)	
<b>Payroll-related insured amount, NTD</b>				
≤15,840	Reference		Reference	
15,841–28,800	0.61 (0.26–1.39)		1.18 (0.66–2.10)	
28,801–45,800	0.93 (0.46–1.88)		1.02 (0.58–1.78)	
≥45,801	1.07 (0.52–2.20)		0.86 (0.46–1.59)	
<b>Medication</b>				
Methotrexate	0.69 (0.19–2.44)		0.81 (0.29–2.26)	
Sulphasalazine	3.04 (0.99–9.26)	3.19 (0.81–12.56)	0.96 (0.41–2.25)	
Leflunomide	<0.01 (<0.01–>99)		1.33 (0.14–12.82)	

Hydroxychloroquine	1.27 (0.75–2.13)		1.26 (0.82–1.95)	
Immunosuppressants	1.47 (0.89–2.45)	1.06 (0.55–2.05)	3.39 (1.62–7.07)	1.84 (0.78–4.34)
Steroid <sup>#</sup> , mg/day	1.09 (1.05–1.14)	1.09 (1.03–1.15)**	1.17 (1.09–1.25)	1.11 (1.03–1.18)**
<b>Air pollutants</b>				
PM2.5 (per 10 µg/m <sup>3</sup> )	0.59 (0.41–0.86)	0.23 (0.07–0.73)*	0.61 (0.44–0.84)	0.73 (0.30–1.76)
PM10 (per 10 µg/m <sup>3</sup> )	0.79 (0.64–0.98)	1.96 (0.98–3.89)	0.76 (0.63–0.91)	1.04 (0.61–1.75)
SO <sub>2</sub> (per 10 ppb)	0.13 (0.01–1.30)	0.41 (0.01–15.74)	0.08 (0.01–0.61)	0.10 (0.01–1.41)
NO <sub>2</sub> (per 10 ppb)	1.41 (0.93–2.15)	0.98 (0.15–6.57)	0.99 (0.70–1.40)	
CO (per 1 ppm)	2.45 (0.96–6.20)	0.94 (0.03–26.11)	1.34 (0.59–3.04)	
O <sub>3</sub> (per 10 ppb)	0.23 (0.09–0.58)	0.06 (0.01–0.43)**	0.65 (0.31–1.34)	

<sup>#</sup>Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO2, sulphur dioxide; NO2, nitrogen dioxide; CO, carbon monoxide; O3, ozone. \* p<0.05, \*\* p<0.005.

**Table 5. Crude and adjusted odds ratios for the association between the risk of ILD development and variables in patients with systemic sclerosis and dermatomyositis/polymyositis**

Variable	Systemic sclerosis		Dermatomyositis/polymyositis	
	Univariable OR (95% CI)	Multivariable aOR (95% CI)	Univariable OR (95% CI)	Multivariable aOR (95% CI)
<b>Comorbidity</b>				
CCI without pulmonary disease	0.39 (0.11–1.46)	5.51 (1.11–27.26)*	1.55 (0.68–3.54)	
COPD	0.80 (0.33–1.91)	2.80 (0.97–8.07)	4.19 (1.38–12.71)	6.73 (1.39–32.51)*
<b>Urbanisation</b>				
Level 1	Reference	Reference	Reference	
Level 2	1.02 (0.47–2.20)	1.53 (0.56–4.18)	0.90 (0.39–2.08)	
Level 3	0.39 (0.11–1.46)	0.73 (0.15–3.68)	0.74 (0.26–2.13)	
Level 4	0.80 (0.33–1.91)	1.97 (0.51–7.57)	0.84 (0.31–2.27)	
<b>Payroll-related insured amount, NTD</b>				
≤15,840	Reference		Reference	Reference
15,841–28,800	1.01 (0.36–2.79)		0.36 (0.12–1.11)	0.39 (0.09–1.61)
28,801–45,800	1.19 (0.45–3.12)		0.66 (0.25–1.77)	0.32 (0.09–1.16)
≥45,801	1.14 (0.42–3.14)		0.74 (0.30–1.86)	0.24 (0.06–0.94)*
<b>Medication</b>				
Methotrexate	1.00 (0.24–4.11)		5.70 (2.74–11.88)	7.55 (2.77–20.62)**
Sulphasalazine	<0.01 (<0.01–>99)		12.00	2.31 (0.14–36.92)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46

				(1.25–115.36)	
Leflunomide	2.00 (0.18–22.06)			>99(<0.01–>99)	
Hydroxychloroquine	0.87 (0.44–1.72)			2.21 (1.12–4.39)	0.95 (0.38–2.38)
Immunosuppressants	2.11 (1.01–4.44)	1.05 (0.40–2.74)		1.52 (0.79–2.95)	
Steroid <sup>#</sup> , mg/day	1.16 (1.07–1.25)	1.12 (1.02–1.23)*		1.07 (1.02–1.11)	1.06 (1.004–1.12)*
<b>Air pollutants</b>					
PM2.5 (per 10 µg/m <sup>3</sup> )	0.69 (0.41–1.18)	1.14 (0.27–4.73)		0.57 (0.34–0.95)	0.31 (0.05–1.80)
PM10 (per 10 µg/m <sup>3</sup> )	0.77 (0.57–1.04)	0.91 (0.35–2.35)		0.72 (0.54–0.97)	1.34 (0.47–3.79)
SO <sub>2</sub> (per 10 ppb)	0.06 (0.00–2.27)	0.12 (<0.01–16.34)		0.07 (0.00–1.99)	2.82 (0.01–574.01)
NO <sub>2</sub> (per 10 ppb)	0.95 (0.53–1.70)			0.90 (0.50–1.62)	
CO (per 1 ppm)	0.96 (0.24–3.86)			0.51 (0.11–2.43)	
O <sub>3</sub> (per 10 ppb)	0.28 (0.08–1.02)	0.16 (0.02–1.30)		0.30 (0.08–1.11)	0.36 (0.06–2.40)

<sup>#</sup>Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone. \* p<0.05, \*\* p<0.005.



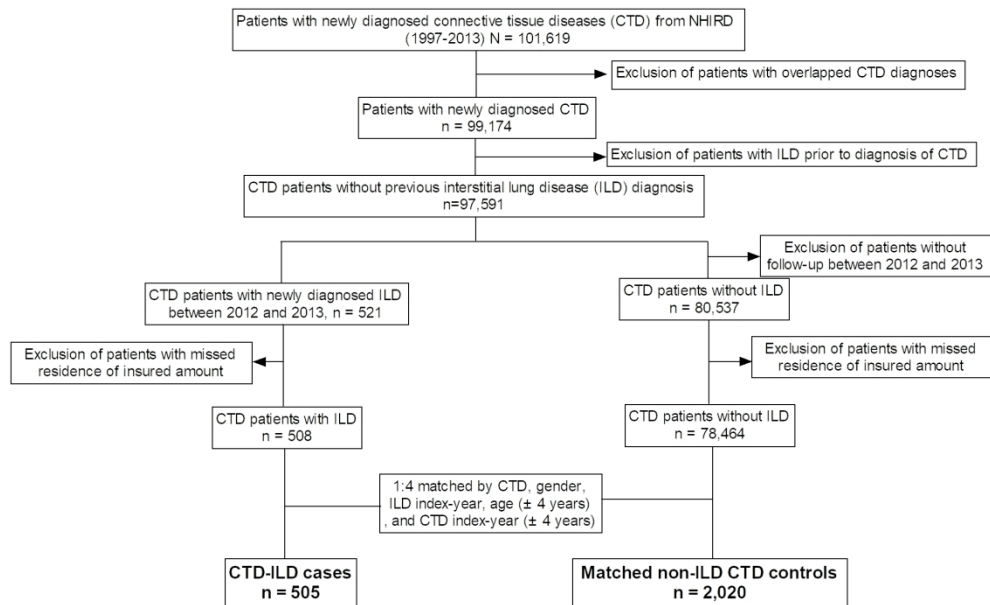


Figure 1

179x110mm (300 x 300 DPI)

**Supplemental Table 1. Crude and adjusted odds ratios for the association between ILD and variables in patients with CTD**

	OR (95% CI)	aOR (95% CI)
<b>Comorbidity</b>		
CCI without pulmonary disease	2.16 (1.42–3.30)	1.64 (1.03–2.62)
COPD	4.35 (2.92–6.48)	3.63 (2.38–5.54)
<b>Urbanisation</b>		
Level 1	Reference	
Level 2	0.89 (0.63–1.27)	
Level 3	0.80 (0.51–1.25)	
Level 4	0.88 (0.61–1.29)	
<b>Payroll-related insured amount, NTD</b>		
≤15,840	Reference	
15,841–20,100	1.15 (0.76–1.72)	
20,100–27,600	1.00 (0.69–1.46)	
≥27,600	0.94 (0.61–1.46)	
<b>Medication</b>		
Methotrexate	1.66 (1.17–2.37)	1.31 (0.87–1.96)
Sulphasalazine	1.31 (0.90–1.93)	0.86 (0.56–1.32)
Leflunomide	1.57 (0.91–2.71)	1.07 (0.57–1.99)
Hydroxychloroquine	1.59 (1.18–2.14)	1.31 (0.95–1.82)
Immunosuppressants	2.21 (1.50–3.27)	1.29 (0.83–2.01)
Steroid*, mg/day	1.13 (1.09–1.17)	1.11 (1.06–1.15)
Anti-TNF	2.10 (1.21–3.64)	1.25 (0.79–1.97)
Tocilizumab	8.00 (0.73–88.23)	1.46 (0.78–2.71)
Rituximab	2.55 (0.99–6.57)	8.11 (0.55–120.18)
<b>Air pollutants</b>		
PM2.5 (per 10 µg/m <sup>3</sup> )	0.71 (0.57–0.89)	0.71 (0.37–1.37)
PM10 (per 10 µg/m <sup>3</sup> )	0.82 (0.73–0.93)	1.10 (0.75–1.63)
SO <sub>2</sub> (per 10 ppb)	0.27 (0.08–0.94)	0.52 (0.10–2.68)
NO <sub>2</sub> (per 10 ppb)	1.04 (0.81–1.32)	
CO (per 1 ppm)	1.25 (0.69–2.26)	
O <sub>3</sub> (per 10 ppb)	0.54 (0.32–0.91)	0.47 (0.25–0.89)

\*Prednisolone equivalent. Abbreviations: ILD, interstitial lung disease; CCI, Charlson comorbidity index; COPD, chronic obstructive pulmonary disease; TNF, tumour necrosis factor; NA, not available; PM2.5, particulate matter <2.5 µm; PM10, particulate matter <10 µm; SO<sub>2</sub>, sulphur dioxide; NO<sub>2</sub>, nitrogen dioxide; CO, carbon monoxide; O<sub>3</sub>, ozone.

ID	sex	RD	RD-age	ILD	index_date	ILD-age	Disease du COPD
1	1	1	1	26	0 2013/2/9	37	11 0
2	2	0	1	32	0 2012/5/9	49	17 0
3	3	0	1	45	1 2013/9/18	63	18 1
4	4	0	1	46	0 2013/1/10	64	18 0
5	5	0	1	51	1 2013/7/21	62	11 0
6	6	1	1	21	1 2012/12/6	21	0 0
7	7	0	1	27	1 2012/3/1	31	4 0
8	8	0	1	27	0 2013/1/2	34	7 0
9	9	0	1	39	0 2012/1/6	54	15 1
10	10	0	1	36	0 2013/1/1	54	18 0
11	11	0	1	41	0 2013/2/8	54	13 0
12	12	1	1	18	0 2013/2/28	31	13 0
13	13	0	1	36	0 2012/1/11	52	16 0
14	14	0	1	34	0 2012/2/4	51	17 0
15	15	0	1	24	0 2012/1/17	31	7 0
16	16	0	1	22	0 2012/1/4	23	1 0
17	17	0	1	41	0 2012/1/3	44	3 0
18	18	0	1	36	0 2012/1/2	52	16 0
19	19	0	1	48	0 2013/1/3	51	3 0
20	20	0	1	60	0 2012/1/4	77	17 0
21	21	0	1	21	1 2012/4/10	35	14 0
22	22	0	1	19	0 2012/1/2	36	17 0
23	23	0	1	52	0 2012/2/13	66	14 0
24	24	0	1	29	0 2012/1/12	37	8 0
25	25	1	1	23	0 #####	23	0 0
26	26	0	1	23	0 2012/1/3	35	12 0
27	27	1	1	56	0 2012/1/11	57	1 1
28	28	0	1	20	1 2012/6/19	30	10 0
29	29	0	1	27	0 2013/4/13	40	13 0
30	30	0	1	62	0 2012/1/17	63	1 0
31	31	0	1	17	0 2013/1/8	33	16 0
32	32	0	1	47	0 2012/3/9	57	10 0
33	33	0	1	23	0 2012/1/2	40	17 0
34	34	0	1	26	0 2012/1/2	43	17 0
35	35	0	1	43	1 #####	48	5 0
36	36	0	1	32	1 #####	41	9 0
37	37	0	1	55	1 2012/4/9	57	2 0
38	38	0	1	62	1 2013/10/2	62	0 0
39	39	0	1	46	0 2013/1/2	49	3 1
40	40	1	1	19	0 2012/1/17	33	14 0
41	41	0	1	15	1 2012/2/29	32	17 1
42	42	0	1	22	0 2013/2/1	29	7 0
43	43	0	1	44	0 2012/1/3	54	10 0
44	44	0	1	22	0 2012/1/2	38	16 0
45	45	0	1	24	0 2012/2/11	35	11 0
46	46	0	1	32	0 2012/1/12	40	8 0
47	47	0	1	33	0 2012/1/6	49	16 0
48	48	0	1	35	0 2012/1/3	43	8 0
49	49	0	1	35	1 2013/12/3	52	17 0
50	50	0	1	43	1 2012/4/11	60	17 1
51	51	1	1	80	0 2013/2/8	80	0 0
52	52	0	1	57	0 2013/1/25	62	5 0
53	53	0	1	39	1 2013/6/4	39	0 0
54	54	0	1	24	0 2012/1/5	39	15 0
55	55	1	1	13	0 2013/1/7	25	12 0

1								
2								
3	56	1	1	54	1 2012/1/13	66	12	1
4	57	0	1	56	0 2012/1/5	67	11	0
5	58	0	1	31	1 2012/5/8	48	17	1
6	59	0	1	42	0 2012/3/26	54	12	0
7	60	0	1	46	0 2012/1/1	63	17	0
8	61	1	1	51	1 #####	51	0	0
9	62	0	1	52	1 2012/9/20	60	8	0
10	63	0	1	49	1 2012/1/2	52	3	0
11	64	0	1	40	0 2013/1/3	48	8	0
12	65	0	1	66	0 2013/1/8	69	3	0
13	66	0	1	61	0 2013/1/3	62	1	0
14	67	0	1	22	0 2012/2/17	35	13	0
15	68	1	1	18	1 2013/3/12	33	15	0
16	69	0	1	26	0 2013/1/8	34	8	0
17	70	1	1	17	0 2012/1/2	34	17	0
18	71	0	1	37	0 2012/1/7	43	6	0
19	72	1	1	71	0 2013/1/5	72	1	0
20	73	0	1	38	1 #####	39	1	0
21	74	0	1	37	0 2012/1/4	54	17	0
22	75	0	1	32	1 #####	38	6	1
23	76	0	1	37	1 2013/4/25	55	18	0
24	77	0	1	33	0 2013/1/9	51	18	0
25	78	0	1	28	1 2012/9/25	40	12	1
26	79	1	1	57	1 2012/3/7	57	0	1
27	80	0	1	30	0 2012/1/4	39	9	0
28	81	0	1	45	0 2012/1/3	62	17	0
29	82	1	1	17	0 2013/1/22	35	18	0
30	83	0	1	24	0 2013/1/30	42	18	0
31	84	0	1	23	1 #####	41	18	0
32	85	0	1	39	0 2013/1/17	52	13	0
33	86	1	1	20	0 2013/1/9	35	15	0
34	87	0	1	28	1 2013/4/29	31	3	0
35	88	0	1	37	0 2012/1/2	54	17	0
36	89	0	1	52	1 #####	63	11	0
37	90	0	1	61	0 2012/1/21	73	12	0
38	91	0	1	57	0 2012/1/16	71	14	0
39	92	0	1	52	0 2013/1/15	57	5	0
40	93	0	1	39	0 2012/1/9	53	14	0
41	94	0	1	23	0 2012/3/17	37	14	0
42	95	0	1	33	0 2012/1/12	40	7	0
43	96	0	1	30	0 2013/1/16	36	6	0
44	97	0	1	48	1 2012/1/10	58	10	1
45	98	0	1	40	0 2013/1/2	46	6	0
46	99	0	1	39	0 2012/1/1	53	14	0
47	100	0	1	40	0 2013/1/6	43	3	0
48	101	0	1	40	0 2012/1/7	50	10	0
49	102	0	1	52	0 2012/1/13	61	9	0
50	103	0	1	30	0 2012/1/7	33	3	0
51	104	0	1	46	0 2013/1/3	54	8	0
52	105	0	1	19	0 2013/1/7	24	5	0
53	106	0	1	59	0 2012/1/4	60	1	0
54	107	0	1	27	0 2013/1/7	38	11	1
55	108	0	1	47	0 2013/2/4	51	4	0
56	109	0	1	34	0 2012/5/9	43	9	0
57	110	0	1	42	0 2013/1/15	55	13	0
58	111	0	1	32	0 2013/1/2	50	18	0

1									
2									
3	112	0	1	16	0	2012/2/11	28	12	0
4	113	0	1	17	0	2012/2/7	29	12	0
5	114	0	1	46	1	2012/2/14	52	6	0
6	115	0	1	85	0	2013/7/16	85	0	0
7	116	0	1	56	1	2012/4/6	73	17	0
8	117	0	1	15	0	2012/2/10	22	7	0
9	118	0	1	65	0	2012/1/4	74	9	0
10	119	0	1	35	1	#####	42	7	0
11	120	0	1	85	0	2013/5/2	85	0	0
12	121	0	1	39	0	2013/1/21	56	17	1
13	122	1	1	66	0	2012/2/7	73	7	0
14	123	0	1	38	0	2013/2/5	56	18	0
15	124	0	1	23	0	2013/1/2	35	12	0
16	125	0	1	72	0	2012/1/3	75	3	0
17	126	1	1	14	0	2013/1/31	30	16	0
18	127	0	1	34	0	2012/2/21	48	14	0
19	128	1	1	56	0	2012/1/11	58	2	0
20	129	0	1	24	0	2012/1/2	41	17	0
21	130	0	1	18	0	2012/1/16	23	5	0
22	131	0	1	17	1	2012/7/12	34	17	0
23	132	0	1	25	0	2013/1/7	41	16	0
24	133	0	1	29	0	2013/1/8	37	8	0
25	134	0	1	28	0	2012/1/2	29	1	0
26	135	0	1	27	0	2012/1/3	44	17	0
27	136	0	1	30	0	2013/1/23	34	4	0
28	137	0	1	49	0	2013/1/21	60	11	0
29	138	0	1	64	1	2012/6/23	65	1	0
30	139	0	1	19	1	2013/5/17	37	18	0
31	140	0	1	59	0	2012/3/2	59	0	0
32	141	0	1	21	0	2013/1/3	34	13	0
33	142	0	1	32	0	2013/1/30	50	18	0
34	143	0	1	58	0	2012/1/16	67	9	0
35	144	0	1	34	0	2013/1/17	39	5	0
36	145	0	1	52	0	2013/1/12	57	5	0
37	146	1	1	75	0	2013/2/18	75	0	1
38	147	0	1	87	1	2013/7/23	88	1	0
39	148	0	1	31	0	2012/1/21	34	3	0
40	149	0	1	35	0	2012/2/1	48	13	0
41	150	1	1	49	0	2013/1/3	61	12	1
42	151	0	1	23	1	2013/1/8	39	16	0
43	152	1	1	49	0	2012/1/9	52	3	0
44	153	0	1	28	0	2012/1/2	34	6	0
45	154	1	1	65	0	2013/1/25	66	1	0
46	155	0	1	72	1	2012/5/8	77	5	1
47	156	0	1	33	0	2012/1/6	34	1	0
48	157	1	1	60	0	2012/2/3	61	1	1
49	158	1	1	47	0	2012/5/22	47	0	0
50	159	0	1	34	0	2012/1/4	51	17	0
51	160	1	1	25	0	2012/1/10	38	13	0
52	161	0	1	45	0	2012/1/3	55	10	0
53	162	0	1	16	0	2012/1/3	33	17	0
54	163	1	1	47	0	2012/2/17	51	4	0
55	164	0	1	28	0	2012/2/14	36	8	0
56	165	0	1	33	0	2013/1/10	44	11	0
57	166	0	1	28	0	2013/2/8	45	17	0
58	167	0	1	36	0	2012/1/2	53	17	0

1									
2									
3	168	0	1	71	1	2013/7/18	71	0	0
4	169	0	1	26	0	2013/1/7	44	18	0
5	170	0	1	36	0	2013/6/27	39	3	0
6	171	0	1	36	0	2012/1/14	53	17	0
7	172	0	1	62	0	2012/1/27	73	11	0
8	173	0	1	50	0	2013/1/4	56	6	0
9	174	0	1	56	0	2013/1/9	72	16	0
10	175	0	1	38	0	2012/1/2	48	10	0
11	176	1	1	21	0	2012/3/9	22	1	0
12	177	0	1	21	0	2012/1/6	33	12	0
13	178	0	1	28	0	2012/1/7	36	8	0
14	179	0	1	37	0	2012/1/2	54	17	0
15	180	0	1	16	1	2012/11/8	19	3	0
16	181	0	1	40	0	2013/1/25	54	14	0
17	182	0	1	47	0	2012/2/11	57	10	0
18	183	0	1	36	0	2013/1/18	41	5	0
19	184	1	1	52	0	2012/2/16	64	12	0
20	185	0	1	14	0	2012/1/18	18	4	0
21	186	0	1	42	0	2013/1/2	56	14	0
22	187	0	1	52	0	2012/1/12	60	8	0
23	188	0	1	23	0	2013/1/29	37	14	0
24	189	0	1	35	0	2013/1/10	45	10	0
25	190	0	1	22	0	2012/3/2	38	16	0
26	191	0	1	26	0	2012/1/4	30	4	0
27	192	0	1	18	1	2012/7/6	27	9	0
28	193	0	1	40	0	2012/1/4	43	3	1
29	194	0	1	26	1	2013/5/20	35	9	0
30	195	0	1	45	0	2013/2/4	63	18	0
31	196	0	1	48	0	2012/1/2	58	10	0
32	197	0	1	35	0	2012/1/4	52	17	0
33	198	1	1	66	0	2012/1/17	70	4	0
34	199	0	1	37	0	2012/2/24	51	14	0
35	200	0	1	27	0	2013/1/8	39	12	0
36	201	0	1	21	0	2013/1/11	28	7	0
37	202	0	1	25	0	2013/4/12	43	18	0
38	203	0	1	36	0	2012/1/19	43	7	0
39	204	1	1	48	1	2013/9/9	62	14	0
40	205	0	1	35	0	2013/3/12	44	9	0
41	206	0	1	64	0	2012/7/9	64	0	0
42	207	1	1	68	1	2012/4/22	72	4	0
43	208	0	1	40	0	2012/2/24	55	15	0
44	209	1	1	27	0	2013/1/7	32	5	0
45	210	0	1	53	1	2012/9/4	70	17	0
46	211	0	1	23	0	2012/1/3	38	15	0
47	212	1	1	21	1	2012/8/28	36	15	0
48	213	1	1	30	0	2013/1/16	35	5	0
49	214	0	1	48	0	2012/1/4	59	11	0
50	215	0	1	56	0	2012/2/6	61	5	0
51	216	0	1	53	1	2013/1/27	71	18	0
52	217	0	1	76	0	2012/1/7	80	4	0
53	218	0	1	19	0	2013/1/29	24	5	0
54	219	0	1	42	1	2012/6/28	54	12	0
55	220	0	1	28	0	2013/1/10	33	5	0
56	221	0	1	54	0	#####	54	0	0
57	222	0	1	57	0	2012/2/11	63	6	0
58	223	1	1	19	0	2012/1/11	21	2	0

1									
2									
3	224	0	1	42	0	2012/1/17	52	10	0
4	225	0	1	35	0	2012/1/11	39	4	0
5	226	0	1	28	0	2013/1/8	30	2	0
6	227	0	1	51	0	2012/1/9	57	6	0
7	228	0	1	85	0	2013/10/1	85	0	0
8	229	0	1	40	0	2013/1/29	53	13	0
9	230	0	1	32	0	2013/1/2	34	2	0
10	231	0	1	43	1	2013/3/29	46	3	0
11	232	1	1	28	0	2013/3/29	39	11	0
12	233	0	1	32	0	2012/1/3	45	13	0
13	234	1	1	65	0	2012/1/4	69	4	1
14	235	0	1	19	0	2012/3/5	32	13	0
15	236	0	1	61	0	2012/1/4	73	12	0
16	237	0	1	27	0	2012/1/3	37	10	0
17	238	0	1	54	0	2013/1/3	62	8	0
18	239	0	1	34	0	2012/1/16	40	6	0
19	240	0	1	36	1	2012/6/15	37	1	0
20	241	0	1	30	0	2013/1/2	48	18	0
21	242	0	1	26	0	2013/1/2	32	6	0
22	243	0	1	25	0	2012/1/5	42	17	0
23	244	0	1	23	0	2012/1/2	35	12	0
24	245	0	1	17	0	2012/2/22	33	16	0
25	246	0	1	43	1	2012/8/3	58	15	1
26	247	0	1	70	0	2013/1/2	74	4	0
27	248	0	1	42	0	2012/2/8	55	13	0
28	249	0	1	30	1	2013/3/16	30	0	0
29	250	0	1	27	0	2012/1/12	33	6	0
30	251	0	1	53	0	2013/5/21	53	0	0
31	252	0	1	51	0	2012/3/2	66	15	0
32	253	0	1	39	1	2013/1/12	57	18	1
33	254	0	1	60	0	2012/1/2	73	13	1
34	255	0	1	45	0	2013/4/19	45	0	0
35	256	0	1	38	0	2013/1/21	53	15	0
36	257	1	1	49	0	2013/1/2	61	12	0
37	258	0	1	51	1	2013/5/28	55	4	0
38	259	1	1	27	0	2013/4/17	36	9	0
39	260	1	1	54	0	2012/2/24	65	11	0
40	261	0	1	61	0	2012/4/27	61	0	1
41	262	0	1	23	0	2013/1/20	41	18	0
42	263	0	1	18	0	2013/1/4	31	13	0
43	264	0	1	57	0	2013/3/4	71	14	0
44	265	0	1	31	0	2012/1/3	34	3	0
45	266	0	1	49	1	#####	56	7	1
46	267	0	1	33	0	2013/1/3	41	8	0
47	268	0	1	39	1	2012/2/18	50	11	1
48	269	0	1	43	0	2012/3/1	55	12	0
49	270	0	1	37	1	2013/3/5	38	1	0
50	271	0	1	42	0	2012/1/11	59	17	0
51	272	0	1	55	1	2012/6/1	71	16	1
52	273	0	1	44	0	2012/1/3	51	7	0
53	274	0	1	26	0	2012/1/10	36	10	0
54	275	0	1	18	0	2012/9/19	18	0	0
55	276	0	1	24	0	2012/1/14	34	10	0
56	277	1	1	57	0	2012/1/8	58	1	0
57	278	1	1	57	0	2012/1/3	65	8	1
58	279	1	1	65	0	2013/1/4	69	4	0

1									
2									
3	280	0	1	30	0	2013/2/23	38	8	0
4	281	0	1	62	0	#####	62	0	0
5	282	0	1	15	0	2012/1/4	31	16	0
6	283	0	1	66	0	2013/5/2	66	0	0
7	284	0	1	36	0	2012/1/13	53	17	0
8	285	0	1	53	0	2012/1/30	68	15	1
9	286	0	1	45	0	2013/1/2	61	16	1
10	287	0	1	56	1	2013/5/18	60	4	0
11	288	0	1	28	0	2013/2/25	33	5	0
12	289	0	1	32	0	2013/1/3	37	5	0
13	290	1	1	44	0	2013/1/25	62	18	0
14	291	0	1	36	0	2013/2/18	44	8	0
15	292	0	1	37	0	2012/1/9	42	5	0
16	293	1	1	69	1	2013/9/3	70	1	1
17	294	0	1	74	0	2013/1/5	75	1	0
18	295	0	1	29	0	2012/3/27	36	7	0
19	296	0	1	48	0	2013/5/2	54	6	0
20	297	0	1	58	0	2013/5/30	58	0	0
21	298	0	1	33	1	2012/11/6	50	17	0
22	299	0	1	41	0	2012/2/4	49	8	0
23	300	0	1	48	0	2012/1/5	49	1	0
24	301	1	1	79	1	2013/3/13	79	0	1
25	302	0	1	62	0	2012/1/16	74	12	0
26	303	0	1	55	0	2012/1/3	58	3	0
27	304	0	1	16	1	#####	18	2	0
28	305	0	1	39	1	2013/2/22	43	4	0
29	306	0	1	57	0	2012/1/13	69	12	0
30	307	0	1	31	1	2013/1/29	32	1	0
31	308	0	1	45	0	2012/1/12	53	8	0
32	309	1	1	72	0	2012/1/2	74	2	0
33	310	1	1	74	0	2013/1/22	76	2	0
34	311	0	1	51	0	2013/1/7	52	1	0
35	312	0	1	25	0	2013/1/18	36	11	0
36	313	0	1	32	0	2013/1/8	33	1	0
37	314	0	1	33	0	#####	33	0	0
38	315	0	1	27	0	2012/1/3	43	16	0
39	316	0	1	41	0	2012/2/6	49	8	0
40	317	0	1	21	0	2013/1/2	32	11	0
41	318	0	1	34	0	2012/1/4	47	13	0
42	319	0	1	23	0	2013/1/8	39	16	0
43	320	0	1	26	0	2013/1/2	41	15	0
44	321	0	1	28	0	2012/6/5	28	0	0
45	322	0	1	25	0	2013/1/21	41	16	0
46	323	0	1	30	1	2012/4/10	39	9	0
47	324	0	1	51	0	2012/2/17	52	1	0
48	325	1	1	17	0	2012/1/10	19	2	0
49	326	0	1	37	1	2012/7/11	51	14	1
50	327	0	1	37	0	2013/1/7	51	14	0
51	328	0	1	29	1	2012/9/24	45	16	0
52	329	1	1	49	0	2012/1/9	51	2	0
53	330	0	1	26	1	2012/1/9	36	10	0
54	331	0	1	30	0	2012/1/3	40	10	0
55	332	1	1	29	1	2013/9/20	37	8	0
56	333	0	1	37	0	2012/1/27	54	17	0
57	334	0	1	28	0	2013/1/31	46	18	0
58	335	0	1	42	1	2013/1/30	60	18	0



1									
2									
3	336	0	1	26	0	2012/1/3	37	11	0
4	337	0	1	32	0	2012/1/3	38	6	0
5	338	0	1	27	0	2013/2/4	32	5	0
6	339	0	1	40	0	2013/1/22	41	1	0
7	340	0	1	26	1	#####	27	1	0
8	341	1	1	18	0	2012/1/4	33	15	0
9	342	0	1	29	0	2013/1/31	38	9	0
10	343	0	1	42	0	2012/1/18	55	13	0
11	344	0	1	24	0	2013/1/29	37	13	0
12	345	0	1	40	0	2013/1/16	43	3	0
13	346	0	1	18	1	2013/8/22	36	18	0
14	347	0	1	54	0	2012/1/6	71	17	0
15	348	0	1	35	0	2012/1/30	45	10	0
16	349	0	1	11	0	2012/1/18	15	4	0
17	350	0	1	22	0	2012/1/18	39	17	0
18	351	0	1	47	1	2012/12/6	58	11	1
19	352	0	1	19	0	2012/1/31	20	1	0
20	353	0	1	76	0	2012/1/5	77	1	0
21	354	0	1	30	0	2012/1/19	40	10	0
22	355	0	1	53	0	2013/1/2	71	18	0
23	356	0	1	42	0	2013/7/22	42	0	0
24	357	0	1	58	0	2013/1/3	75	17	0
25	358	0	1	42	0	2013/1/5	58	16	0
26	359	0	1	48	0	2013/1/4	66	18	0
27	360	0	1	24	0	2012/1/2	36	12	0
28	361	0	1	41	0	2013/1/2	42	1	0
29	362	0	1	33	0	2013/1/3	51	18	0
30	363	0	1	21	0	2012/1/5	35	14	0
31	364	0	1	40	0	2012/1/4	57	17	1
32	365	1	1	76	0	2013/1/7	77	1	0
33	366	0	1	38	0	2012/1/19	43	5	0
34	367	0	1	41	0	2012/1/1	47	6	0
35	368	0	1	38	0	2013/2/7	45	7	0
36	369	0	1	33	0	2012/1/6	50	17	0
37	370	0	1	53	0	2012/1/7	68	15	0
38	371	0	1	38	1	#####	44	6	0
39	372	0	1	40	0	2012/2/13	55	15	0
40	373	0	1	41	0	2012/2/21	45	4	0
41	374	0	1	40	0	2012/1/2	55	15	0
42	375	1	1	47	0	2012/1/13	62	15	0
43	376	0	1	36	0	2013/1/15	41	5	0
44	377	0	1	22	0	2013/1/12	38	16	0
45	378	0	1	35	0	2013/1/4	52	17	0
46	379	0	1	49	0	2013/1/7	62	13	0
47	380	1	1	74	0	2013/11/4	74	0	0
48	381	0	1	24	1	2012/3/14	41	17	0
49	382	0	1	35	0	2013/2/21	53	18	0
50	383	0	1	68	0	2013/1/2	70	2	0
51	384	1	1	50	0	2013/1/9	62	12	0
52	385	0	1	34	0	2012/1/3	46	12	0
53	386	1	1	21	0	2013/1/12	32	11	0
54	387	0	1	57	0	2012/1/3	68	11	0
55	388	0	1	29	0	2012/1/17	43	14	0
56	389	1	1	20	0	2013/1/11	25	5	0
57	390	0	1	43	0	2012/3/23	50	7	0
58	391	0	1	36	0	2012/1/31	53	17	0

1									
2									
3	392	0	1	26	0	2012/1/16	30	4	0
4	393	0	1	30	1	2013/7/27	48	18	0
5	394	0	1	28	0	2013/1/30	33	5	0
6	395	0	1	26	1	2012/4/27	36	10	0
7	396	0	1	38	0	2013/1/25	46	8	0
8	397	0	1	11	0	2012/1/7	18	7	0
9	398	0	1	26	0	2013/3/4	33	7	0
10	399	0	1	44	0	2013/1/25	52	8	0
11	400	0	1	86	0	2013/2/6	88	2	0
12	401	0	1	27	0	2013/3/25	28	1	0
13	402	0	1	12	0	2012/1/3	24	12	0
14	403	0	1	53	1	2013/8/16	56	3	0
15	404	1	1	20	1	2013/6/27	28	8	0
16	405	0	1	40	0	2012/1/11	47	7	0
17	406	0	1	35	0	2012/1/2	52	17	0
18	407	0	1	42	1	#####	47	5	1
19	408	0	1	47	0	2012/2/7	59	12	0
20	409	0	1	46	0	2013/2/2	59	13	0
21	410	0	1	57	1	2012/6/7	70	13	1
22	411	0	2	53	1	2013/4/19	67	14	0
23	412	0	2	51	0	2012/1/4	58	7	1
24	413	0	2	61	0	2012/1/9	78	17	0
25	414	1	2	60	0	2012/1/11	63	3	0
26	415	0	2	68	1	2013/8/24	73	5	0
27	416	0	2	44	0	2012/1/20	55	11	0
28	417	0	2	48	0	2013/1/4	53	5	0
29	418	0	2	54	1	2012/8/30	69	15	1
30	419	0	2	74	0	2012/1/5	85	11	0
31	420	0	2	46	0	2013/1/2	59	13	0
32	421	0	2	41	0	2013/1/3	45	4	0
33	422	1	2	60	0	2013/1/10	72	12	0
34	423	0	2	30	0	2012/1/11	35	5	0
35	424	1	2	44	0	2012/1/12	61	17	0
36	425	0	2	54	1	2012/6/28	64	10	1
37	426	1	2	49	0	2012/1/6	59	10	0
38	427	0	2	61	0	2013/1/7	73	12	0
39	428	1	2	52	1	2013/7/17	60	8	1
40	429	0	2	65	0	2013/1/14	76	11	0
41	430	0	2	60	0	2013/1/1	76	16	0
42	431	1	2	66	0	2012/1/3	78	12	0
43	432	0	2	55	0	2013/1/21	66	11	0
44	433	0	2	43	1	2013/3/18	50	7	0
45	434	0	2	66	0	2013/1/7	75	9	0
46	435	0	2	79	1	2012/8/21	80	1	1
47	436	0	2	50	0	2013/1/7	54	4	0
48	437	1	2	43	1	2012/1/30	60	17	0
49	438	1	2	80	1	2012/3/29	84	4	1
50	439	1	2	47	0	2013/2/27	61	14	0
51	440	1	2	66	0	2012/1/13	70	4	0
52	441	0	2	67	0	2012/1/30	74	7	0
53	442	0	2	45	0	2012/1/2	55	10	0
54	443	0	2	62	0	2012/1/20	64	2	0
55	444	0	2	59	0	2012/1/2	76	17	0
56	445	0	2	52	0	2013/1/2	63	11	0
57	446	0	2	87	1	2013/2/5	95	8	0
58	447	1	2	63	0	2012/1/2	72	9	0

1									
2									
3	448	0	2	70	0	2012/2/15	76	6	0
4	449	1	2	56	0	2013/1/4	71	15	1
5	450	1	2	48	0	2012/1/17	53	5	0
6	451	0	2	59	1	2013/3/27	70	11	0
7	452	0	2	62	0	2013/1/1	74	12	0
8	453	1	2	64	0	2013/1/18	79	15	1
9	454	1	2	54	0	2012/2/6	62	8	0
10	455	1	2	64	0	2012/1/11	69	5	0
11	456	0	2	49	0	2012/1/18	58	9	0
12	457	0	2	41	1	2013/4/13	55	14	0
13	458	0	2	63	0	2012/1/7	72	9	1
14	459	0	2	54	0	2013/1/2	61	7	0
15	460	0	2	65	0	2013/2/23	73	8	0
16	461	0	2	17	0	2012/1/2	29	12	0
17	462	1	2	52	0	2012/1/6	60	8	0
18	463	0	2	42	1	2013/1/20	47	5	0
19	464	1	2	43	0	2013/2/19	54	11	0
20	465	0	2	85	0	2012/1/4	94	9	0
21	466	0	2	65	0	2013/1/4	72	7	0
22	467	0	2	45	0	2013/1/8	46	1	0
23	468	0	2	59	1	2013/7/3	65	6	0
24	469	1	2	37	0	2012/1/4	54	17	0
25	470	1	2	55	0	2012/1/13	62	7	0
26	471	1	2	75	0	2012/1/3	85	10	0
27	472	1	2	60	0	2013/1/10	66	6	0
28	473	1	2	56	1	#####	58	2	0
29	474	1	2	54	0	2012/1/2	62	8	0
30	475	1	2	46	0	#####	46	0	0
31	476	0	2	66	0	2013/1/8	73	7	0
32	477	0	2	54	0	2013/1/2	65	11	0
33	478	1	2	43	0	2013/2/25	59	16	0
34	479	1	2	74	0	2013/1/11	80	6	0
35	480	0	2	44	0	2013/1/12	56	12	0
36	481	1	2	55	0	2013/1/14	56	1	0
37	482	0	2	69	1	2012/9/25	71	2	0
38	483	1	2	44	0	2012/1/13	60	16	0
39	484	1	2	65	0	2013/1/17	66	1	0
40	485	0	2	68	0	2012/1/13	80	12	0
41	486	1	2	36	0	2012/1/9	41	5	0
42	487	1	2	65	0	2012/1/2	76	11	1
43	488	0	2	59	0	2012/1/6	69	10	0
44	489	0	2	66	0	2013/1/16	73	7	0
45	490	0	2	46	0	2013/1/8	58	12	0
46	491	1	2	54	0	2013/3/22	54	0	0
47	492	1	2	69	0	2012/2/4	79	10	0
48	493	0	2	75	0	2013/2/18	75	0	0
49	494	0	2	39	1	2013/9/10	57	18	0
50	495	1	2	59	1	2013/5/23	71	12	0
51	496	1	2	73	0	2012/1/3	80	7	0
52	497	0	2	55	0	2013/1/2	73	18	0
53	498	1	2	81	0	2013/1/8	83	2	0
54	499	1	2	69	1	2012/5/29	70	1	0
55	500	0	2	63	0	2012/1/7	80	17	0
56	501	0	2	58	0	2013/3/22	63	5	0
57	502	0	2	61	0	2013/1/14	70	9	0
58	503	1	2	78	0	2012/2/2	87	9	0

1									
2									
3	504	1	2	63	0	2013/2/7	63	0	0
4	505	0	2	59	1	2012/6/29	60	1	0
5	506	0	2	70	0	2012/1/30	76	6	0
6	507	0	2	48	0	2013/1/3	56	8	1
7	508	1	2	78	0	2013/1/25	79	1	0
8	509	0	2	66	0	2013/1/2	72	6	0
9	510	0	2	55	0	2012/1/12	72	17	0
10	511	0	2	82	0	2012/1/16	85	3	0
11	512	0	2	51	0	2013/1/2	68	17	0
12	513	0	2	70	0	2012/1/5	72	2	0
13	514	0	2	59	0	2012/1/10	61	2	0
14	515	0	2	54	0	2013/1/15	67	13	0
15	516	0	2	59	0	2013/1/10	68	9	0
16	517	1	2	67	1	2012/5/30	71	4	1
17	518	0	2	51	0	2013/1/29	69	18	0
18	519	1	2	50	0	2012/3/3	57	7	0
19	520	0	2	42	1	2012/6/25	54	12	0
20	521	0	2	57	0	2012/1/9	64	7	0
21	522	0	2	50	0	2013/3/24	61	11	0
22	523	0	2	64	1	2012/10/6	70	6	0
23	524	1	2	69	0	2013/1/9	70	1	0
24	525	1	2	65	1	2012/4/16	75	10	0
25	526	1	2	68	0	2013/1/8	82	14	0
26	527	0	2	71	0	2012/1/3	74	3	1
27	528	0	2	67	0	2013/1/7	76	9	0
28	529	0	2	66	0	2013/2/10	71	5	0
29	530	0	2	44	1	2013/9/16	58	14	0
30	531	0	2	36	0	2012/1/12	38	2	0
31	532	1	2	77	1	2012/1/10	80	3	0
32	533	1	2	31	0	2012/1/3	44	13	0
33	534	0	2	77	1	2012/12/5	81	4	0
34	535	1	2	48	0	2012/1/18	55	7	1
35	536	0	2	53	0	2012/1/2	65	12	0
36	537	0	2	54	0	2013/1/2	57	3	0
37	538	0	2	59	0	2013/1/4	62	3	0
38	539	0	2	42	0	2013/1/15	49	7	0
39	540	0	2	51	0	2013/1/1	62	11	0
40	541	0	2	59	0	2012/1/6	71	12	0
41	542	1	2	80	0	2013/1/7	84	4	0
42	543	0	2	61	0	2013/1/13	66	5	0
43	544	1	2	44	0	2013/1/11	55	11	0
44	545	0	2	60	1	2013/9/5	60	0	0
45	546	0	2	53	0	2012/1/3	62	9	0
46	547	0	2	67	0	2013/1/1	68	1	0
47	548	0	2	40	1	2012/5/23	54	14	0
48	549	0	2	60	1	2013/12/6	65	5	0
49	550	0	2	46	0	2012/1/1	57	11	0
50	551	0	2	42	0	2013/1/1	60	18	0
51	552	1	2	59	0	2013/1/14	69	10	0
52	553	0	2	49	1	2013/8/3	51	2	0
53	554	0	2	44	0	2013/1/2	60	16	0
54	555	0	2	81	0	#####	81	0	1
55	556	1	2	63	0	2012/2/1	75	12	0
56	557	0	2	54	0	2013/1/25	71	17	0
57	558	0	2	50	0	2012/1/3	51	1	0
58	559	0	2	57	0	2013/2/20	62	5	0

1								
2								
3	560	0	2	71	1 2012/4/11	82	11	0
4	561	1	2	61	0 2013/3/20	74	13	0
5	562	0	2	44	0 2013/1/7	51	7	0
6	563	1	2	72	0 2013/1/5	76	4	0
7	564	0	2	69	1 2013/3/11	71	2	0
8	565	1	2	51	1 2012/10/2	63	12	1
9	566	0	2	54	0 2012/1/10	60	6	0
10	567	0	2	57	0 2013/1/24	70	13	0
11	568	0	2	42	0 2012/3/7	48	6	0
12	569	1	2	69	0 2012/1/2	71	2	0
13	570	0	2	60	0 2012/1/12	65	5	0
14	571	0	2	42	1 2012/2/9	59	17	0
15	572	1	2	54	0 2013/1/16	60	6	0
16	573	0	2	63	0 2012/1/19	64	1	0
17	574	0	2	57	0 2012/8/6	57	0	0
18	575	1	2	47	0 2012/1/6	50	3	0
19	576	0	2	50	0 2013/1/3	60	10	0
20	577	1	2	58	0 2013/1/2	76	18	1
21	578	0	2	65	1 2013/9/12	78	13	0
22	579	0	2	49	0 2012/1/6	57	8	0
23	580	0	2	70	0 2012/2/3	78	8	0
24	581	0	2	50	0 2012/1/5	59	9	0
25	582	0	2	35	0 2012/1/29	39	4	0
26	583	0	2	56	0 2013/1/3	72	16	0
27	584	0	2	50	0 2013/1/8	54	4	0
28	585	1	2	62	0 2012/2/16	68	6	0
29	586	1	2	56	0 2012/1/10	70	14	0
30	587	0	2	73	0 #####	82	9	0
31	588	0	2	42	0 2012/2/14	48	6	0
32	589	0	2	67	0 2012/1/31	79	12	0
33	590	1	2	49	0 2012/1/10	60	11	1
34	591	0	2	85	0 2012/1/5	94	9	0
35	592	0	2	58	1 2013/10/4	68	10	0
36	593	0	2	75	0 2012/1/16	86	11	0
37	594	0	2	39	1 2013/11/2	57	18	0
38	595	1	2	54	1 #####	58	4	1
39	596	0	2	48	0 2012/1/30	55	7	0
40	597	0	2	41	0 2013/1/9	54	13	0
41	598	0	2	39	0 2013/1/9	51	12	0
42	599	1	2	42	0 2013/2/4	50	8	0
43	600	1	2	40	0 2012/1/9	47	7	1
44	601	0	2	42	0 2013/1/3	53	11	0
45	602	0	2	59	0 2013/1/11	64	5	0
46	603	0	2	54	0 2013/2/5	65	11	0
47	604	0	2	50	0 2012/1/2	62	12	0
48	605	1	2	65	0 2012/1/2	74	9	0
49	606	0	2	51	0 2013/1/7	61	10	0
50	607	0	2	44	0 2013/1/4	55	11	0
51	608	0	2	54	0 2013/1/1	60	6	1
52	609	0	2	72	0 2012/1/13	74	2	0
53	610	0	2	49	0 2013/1/22	58	9	0
54	611	1	2	79	0 2013/1/2	84	5	1
55	612	0	2	58	0 2012/3/7	60	2	0
56	613	0	2	58	0 2013/1/8	72	14	0
57	614	0	2	46	0 2013/3/12	61	15	0
58	615	0	2	64	0 2012/1/14	72	8	0

1									
2									
3	616	0	2	44	0	2012/1/13	61	17	0
4	617	1	2	76	0	2012/1/10	80	4	0
5	618	0	2	46	0	2013/1/8	57	11	0
6	619	0	2	45	0	2013/1/4	50	5	0
7	620	0	2	46	0	2012/1/10	54	8	0
8	621	0	2	65	0	2013/1/4	82	17	0
9	622	1	2	74	1	#####	75	1	0
10	623	0	2	45	0	2012/2/2	57	12	0
11	624	0	2	49	0	2012/1/31	55	6	0
12	625	0	2	78	1	#####	80	2	1
13	626	0	2	53	0	2013/1/16	71	18	0
14	627	1	2	72	0	2012/1/3	85	13	0
15	628	0	2	71	1	#####	83	12	0
16	629	1	2	53	0	2012/1/17	58	5	0
17	630	0	2	54	0	2012/1/11	55	1	0
18	631	1	2	52	0	2013/1/30	61	9	0
19	632	0	2	44	1	2013/4/8	62	18	0
20	633	0	2	54	0	2013/6/27	54	0	0
21	634	1	2	56	0	2013/1/21	71	15	0
22	635	1	2	57	1	2013/8/7	63	6	1
23	636	1	2	52	0	2012/1/3	59	7	0
24	637	1	2	66	0	2013/1/5	70	4	1
25	638	1	2	53	0	2012/1/13	60	7	0
26	639	0	2	43	0	2013/1/3	56	13	0
27	640	0	2	59	0	2012/2/14	69	10	0
28	641	0	2	54	0	2012/1/5	71	17	0
29	642	0	2	60	0	2013/1/8	64	4	0
30	643	1	2	68	0	2012/1/3	75	7	0
31	644	1	2	74	0	2012/3/6	81	7	0
32	645	1	2	52	0	2013/1/14	55	3	0
33	646	0	2	44	0	2013/1/2	62	18	0
34	647	0	2	47	0	2013/11/1	47	0	0
35	648	0	2	41	1	2012/1/20	42	1	0
36	649	0	2	44	0	2012/2/8	53	9	0
37	650	1	2	66	0	2012/2/17	71	5	0
38	651	0	2	46	0	2013/1/11	56	10	0
39	652	1	2	56	0	2012/1/19	58	2	0
40	653	0	2	45	1	2012/5/16	50	5	0
41	654	0	2	49	0	2012/1/3	60	11	0
42	655	1	2	65	0	2013/1/9	70	5	0
43	656	0	2	53	0	2012/1/17	60	7	0
44	657	1	2	66	0	2012/1/4	76	10	0
45	658	0	2	64	0	2013/1/14	73	9	0
46	659	0	2	58	0	2012/1/16	75	17	0
47	660	1	2	60	0	2012/1/5	65	5	0
48	661	0	2	51	0	2012/1/27	60	9	0
49	662	0	2	16	0	2012/3/1	26	10	0
50	663	0	2	60	0	2013/1/7	70	10	0
51	664	0	2	65	0	2012/1/3	78	13	0
52	665	0	2	64	0	2012/12/3	64	0	1
53	666	0	2	58	0	2013/1/24	71	13	1
54	667	0	2	62	0	2012/1/4	74	12	1
55	668	0	2	29	1	2013/1/26	44	15	1
56	669	0	2	59	0	2013/1/11	70	11	0
57	670	1	2	63	0	2013/1/18	65	2	1
58	671	0	2	41	0	2012/1/5	52	11	0

1									
2									
3	672	0	2	58	0	2012/1/13	62	4	0
4	673	0	2	75	1	2012/7/6	76	1	0
5	674	0	2	53	0	2013/1/7	65	12	0
6	675	0	2	61	0	2013/2/6	70	9	0
7	676	0	2	57	0	2013/6/11	70	13	0
8	677	0	2	56	0	2012/1/3	57	1	0
9	678	0	2	53	0	2012/1/2	58	5	0
10	679	1	2	73	0	#####	73	0	1
11	680	1	2	46	0	2012/1/16	54	8	0
12	681	1	2	72	0	2013/1/9	77	5	1
13	682	0	2	57	0	2013/1/4	67	10	0
14	683	0	2	54	0	2012/1/11	61	7	0
15	684	0	2	43	0	2012/2/6	54	11	0
16	685	0	2	53	0	2013/1/2	65	12	0
17	686	1	2	70	0	2012/1/12	71	1	0
18	687	1	2	67	1	2013/3/9	71	4	0
19	688	0	2	73	1	2013/10/1	83	10	0
20	689	0	2	63	0	2013/1/2	75	12	0
21	690	1	2	76	1	2012/2/29	83	7	0
22	691	0	2	75	0	2013/5/7	75	0	0
23	692	0	2	53	0	2013/1/9	59	6	0
24	693	0	2	63	0	2013/2/15	76	13	1
25	694	0	2	75	0	2013/8/16	75	0	0
26	695	0	2	67	0	2013/1/12	76	9	0
27	696	0	2	65	0	2013/1/7	78	13	0
28	697	0	2	47	0	2013/1/23	49	2	0
29	698	0	2	61	0	2012/9/6	61	0	1
30	699	0	2	54	0	2013/1/3	60	6	0
31	700	1	2	70	0	2012/1/17	87	17	0
32	701	0	2	61	0	2012/2/11	65	4	0
33	702	0	2	45	1	2012/9/24	62	17	0
34	703	0	2	33	1	2013/8/26	43	10	1
35	704	0	2	77	0	2013/1/15	79	2	0
36	705	1	2	62	1	2012/8/8	77	15	0
37	706	1	2	41	0	2012/1/11	55	14	0
38	707	0	2	53	0	2013/1/14	71	18	0
39	708	0	2	70	0	2013/2/5	77	7	0
40	709	0	2	68	0	2013/1/3	71	3	0
41	710	0	2	39	0	2013/1/25	45	6	0
42	711	1	2	58	0	2013/1/2	71	13	0
43	712	0	2	60	0	2013/1/2	75	15	0
44	713	1	2	53	0	2012/1/16	61	8	0
45	714	0	2	84	0	2013/1/9	85	1	0
46	715	0	2	32	0	2012/1/13	45	13	0
47	716	0	2	55	0	2013/1/2	70	15	0
48	717	0	2	54	1	2012/3/28	65	11	1
49	718	1	2	55	0	2012/1/4	66	11	0
50	719	0	2	62	0	2012/6/23	62	0	0
51	720	0	2	79	0	2013/2/21	91	12	0
52	721	0	2	64	0	2013/1/17	71	7	1
53	722	1	2	59	0	2012/1/4	71	12	0
54	723	1	2	55	0	2013/1/22	58	3	0
55	724	0	2	61	0	2013/1/7	73	12	0
56	725	1	2	75	0	2012/2/23	84	9	1
57	726	0	2	52	0	2013/2/5	61	9	0
58	727	0	2	55	0	2012/2/1	63	8	0

1									
2									
3	728	0	2	72	0	2012/1/12	78	6	0
4	729	0	2	69	1	2013/11/6	73	4	0
5	730	0	2	57	0	2013/3/7	64	7	0
6	731	0	2	60	1	2013/8/5	74	14	0
7	732	0	2	67	0	2012/7/30	77	10	1
8	733	0	2	48	1	2013/2/15	56	8	1
9	734	0	2	52	0	2013/1/11	63	11	0
10	735	1	2	51	1	#####	58	7	0
11	736	0	2	50	0	2012/2/9	60	10	0
12	737	0	2	60	0	2013/1/11	61	1	0
13	738	0	2	62	0	2012/1/13	72	10	0
14	739	0	2	46	1	2013/3/29	47	1	0
15	740	0	2	19	0	2012/1/2	26	7	0
16	741	1	2	45	0	2012/3/5	51	6	0
17	742	0	2	53	1	#####	66	13	1
18	743	1	2	66	0	2012/2/27	71	5	0
19	744	1	2	62	0	2013/1/9	72	10	0
20	745	0	2	57	0	#####	57	0	0
21	746	1	2	49	0	2012/2/14	53	4	0
22	747	0	2	62	1	2013/6/19	69	7	1
23	748	1	2	63	0	2012/1/12	65	2	1
24	749	0	2	55	0	2012/3/27	63	8	1
25	750	1	2	67	0	2012/1/3	76	9	0
26	751	1	2	77	0	2012/1/2	86	9	1
27	752	1	2	64	0	2013/1/9	76	12	0
28	753	0	2	67	0	2013/1/3	81	14	0
29	754	0	2	63	0	2013/1/3	74	11	0
30	755	1	2	58	0	2013/1/8	69	11	0
31	756	0	2	69	0	2013/1/5	76	7	0
32	757	0	2	50	0	2013/1/3	61	11	0
33	758	0	2	67	0	#####	67	0	0
34	759	0	2	46	0	2012/1/3	63	17	0
35	760	0	2	71	0	2013/1/1	78	7	0
36	761	0	2	49	0	2012/2/17	50	1	0
37	762	0	2	79	0	#####	79	0	1
38	763	0	2	43	0	2013/1/10	53	10	0
39	764	0	2	50	0	2013/1/23	61	11	0
40	765	1	2	83	1	2012/9/24	84	1	1
41	766	0	2	58	0	2013/1/10	69	11	1
42	767	0	2	56	0	2012/1/13	67	11	0
43	768	0	2	49	0	2013/3/2	53	4	0
44	769	0	2	65	0	2012/1/5	82	17	0
45	770	1	2	38	0	2012/1/11	40	2	0
46	771	1	2	79	1	#####	84	5	0
47	772	0	2	61	0	2013/1/3	76	15	0
48	773	0	2	70	0	2013/1/9	73	3	0
49	774	1	2	48	0	2013/1/8	58	10	0
50	775	1	2	74	0	2012/2/10	85	11	0
51	776	0	2	51	0	2013/4/20	62	11	0
52	777	0	2	60	0	2013/1/6	66	6	0
53	778	1	2	60	0	2012/1/17	67	7	0
54	779	0	2	47	0	2012/1/7	58	11	0
55	780	1	2	49	0	2013/2/19	58	9	0
56	781	0	2	77	0	2013/1/21	83	6	0
57	782	1	2	62	1	2013/1/18	63	1	1
58	783	1	2	47	0	2013/1/8	55	8	0



1									
2									
3	784	0	2	45	0	2012/1/31	50	5	0
4	785	0	2	40	0	2013/3/14	47	7	0
5	786	0	2	39	0	2013/1/4	55	16	0
6	787	0	2	54	1	#####	70	16	0
7	788	0	2	53	0	2013/1/3	64	11	0
8	789	0	2	78	0	2013/1/2	81	3	0
9	790	0	2	47	1	2013/7/24	65	18	0
10	791	0	2	40	0	2013/3/1	57	17	0
11	792	0	2	54	0	2013/1/14	65	11	0
12	793	1	2	61	0	2013/1/10	69	8	1
13	794	0	2	58	0	2012/2/24	68	10	0
14	795	1	2	59	0	2012/9/17	75	16	0
15	796	1	2	54	0	#####	54	0	0
16	797	0	2	53	0	2012/1/14	59	6	0
17	798	0	2	55	0	2013/1/29	71	16	1
18	799	1	2	75	0	2012/1/5	76	1	0
19	800	0	2	49	1	2013/1/10	58	9	0
20	801	0	2	49	1	2013/5/4	59	10	0
21	802	0	2	43	0	2013/1/14	45	2	0
22	803	0	2	59	0	2013/1/12	77	18	0
23	804	0	2	55	0	2013/1/21	66	11	0
24	805	0	2	59	0	2013/1/7	69	10	0
25	806	0	2	53	1	2012/5/17	62	9	0
26	807	0	2	58	0	2012/1/31	72	14	0
27	808	1	2	68	1	2012/8/24	71	3	1
28	809	0	2	60	0	2013/1/2	68	8	0
29	810	0	2	68	0	2013/1/2	76	8	0
30	811	0	2	77	1	2013/3/15	79	2	1
31	812	0	2	41	0	2013/1/24	54	13	0
32	813	0	2	47	0	2013/1/2	55	8	0
33	814	0	2	55	0	2012/1/17	58	3	1
34	815	1	2	61	0	2012/1/16	70	9	0
35	816	1	2	50	0	2013/1/9	68	18	0
36	817	0	2	59	0	2013/1/2	77	18	1
37	818	0	2	41	0	2013/1/8	54	13	0
38	819	0	2	69	0	2012/1/30	77	8	0
39	820	0	2	30	0	2012/1/13	39	9	0
40	821	0	2	50	1	2012/8/27	61	11	0
41	822	0	2	77	0	2012/1/2	85	8	0
42	823	0	2	51	0	2012/2/21	65	14	0
43	824	0	2	65	0	2013/1/16	73	8	1
44	825	1	2	49	1	2012/3/30	52	3	0
45	826	1	2	71	0	2013/3/13	71	0	0
46	827	0	2	61	0	2013/1/22	70	9	0
47	828	0	2	57	1	2013/9/6	66	9	0
48	829	0	2	61	1	2013/1/2	72	11	0
49	830	0	2	51	0	2013/1/3	59	8	0
50	831	0	2	77	1	2013/4/25	80	3	0
51	832	0	2	53	0	2013/1/1	63	10	0
52	833	0	2	60	0	2013/2/20	78	18	0
53	834	0	2	38	0	2013/1/11	54	16	0
54	835	0	2	45	0	2012/1/16	52	7	0
55	836	0	2	58	1	2013/6/12	68	10	1
56	837	0	2	53	0	2012/1/13	59	6	0
57	838	1	2	48	1	2012/9/18	49	1	0
58	839	0	2	64	0	#####	67	3	0

1									
2									
3	840	1	2	53	1	2012/5/25	57	4	0
4	841	0	2	54	0	2013/1/14	71	17	0
5	842	1	2	71	0	2013/1/2	78	7	1
6	843	1	2	61	0	2013/1/7	65	4	0
7	844	0	2	43	0	2013/1/14	56	13	0
8	845	0	2	43	0	2013/1/2	58	15	0
9	846	0	2	34	0	2013/1/7	51	17	0
10	847	0	2	65	0	2012/1/4	77	12	0
11	848	1	2	55	0	2013/3/27	55	0	0
12	849	0	2	52	0	2013/1/21	67	15	1
13	850	0	2	61	0	2013/1/22	76	15	0
14	851	1	2	43	0	2013/1/28	54	11	1
15	852	0	2	69	0	2013/1/2	74	5	0
16	853	1	2	64	0	2012/1/10	74	10	1
17	854	1	2	83	0	2012/1/2	86	3	1
18	855	0	2	72	1	2013/8/20	72	0	1
19	856	0	2	56	0	2012/1/5	73	17	0
20	857	0	2	53	0	2013/1/7	61	8	0
21	858	1	2	70	0	2012/11/8	70	0	0
22	859	1	2	57	0	2012/7/18	57	0	0
23	860	1	2	63	0	2012/1/11	70	7	1
24	861	0	2	48	0	2012/1/16	52	4	0
25	862	0	2	48	1	2013/4/17	55	7	1
26	863	1	2	50	1	2012/7/25	56	6	0
27	864	0	2	61	0	2013/1/5	69	8	0
28	865	0	2	78	0	2012/1/2	80	2	1
29	866	1	2	51	1	2013/5/23	67	16	0
30	867	0	2	57	0	2013/1/3	66	9	0
31	868	1	2	42	0	2012/1/4	51	9	0
32	869	0	2	73	0	2012/1/18	83	10	1
33	870	1	2	64	0	2012/1/6	69	5	1
34	871	0	2	58	1	2012/12/7	59	1	1
35	872	0	2	61	0	2013/1/23	69	8	0
36	873	1	2	66	0	2013/1/9	73	7	0
37	874	1	2	69	0	2012/2/13	76	7	0
38	875	1	2	60	0	2012/1/5	66	6	0
39	876	1	2	58	1	2012/2/8	63	5	1
40	877	0	2	65	1	2013/4/24	76	11	0
41	878	1	2	61	0	2012/2/7	67	6	1
42	879	0	2	52	0	2012/1/31	57	5	0
43	880	0	2	49	0	2013/1/2	54	5	0
44	881	0	2	47	0	2012/1/27	52	5	0
45	882	0	2	56	0	2013/1/10	63	7	0
46	883	1	2	33	1	#####	43	10	1
47	884	0	2	53	1	2012/6/14	55	2	1
48	885	0	2	58	0	2013/1/21	62	4	0
49	886	0	2	58	1	2013/9/8	65	7	0
50	887	0	2	79	1	2013/3/6	80	1	0
51	888	0	2	55	0	2013/1/8	67	12	0
52	889	0	2	39	0	2012/2/29	51	12	0
53	890	1	2	57	0	2012/5/21	57	0	0
54	891	0	2	45	0	2013/3/7	55	10	0
55	892	1	2	69	0	2013/2/22	69	0	0
56	893	0	2	62	0	2012/2/1	79	17	0
57	894	0	2	63	0	2012/1/9	71	8	0
58	895	1	2	41	0	2012/3/3	55	14	0

1									
2									
3	896	1	2	50	0	2012/1/2	57	7	0
4	897	0	2	50	0	2013/2/1	60	10	0
5	898	0	2	55	0	2013/2/26	61	6	0
6	899	1	2	27	0	2012/1/3	40	13	0
7	900	0	2	68	1	2013/1/11	70	2	0
8	901	1	2	73	0	2012/1/6	80	7	1
9	902	1	2	68	0	2012/1/12	72	4	0
10	903	0	2	62	0	2013/7/17	62	0	0
11	904	0	2	51	0	2013/1/2	61	10	0
12	905	1	2	82	1	2013/6/5	87	5	0
13	906	0	2	49	0	2013/1/4	58	9	0
14	907	0	2	68	0	2013/1/10	85	17	0
15	908	1	2	70	0	2012/2/14	76	6	0
16	909	1	2	84	0	2012/1/7	85	1	0
17	910	1	2	67	1	2012/9/27	75	8	0
18	911	0	2	27	0	2013/1/21	45	18	0
19	912	0	2	48	0	#####	48	0	0
20	913	1	2	48	0	2012/2/17	55	7	0
21	914	0	2	57	0	2013/7/1	70	13	0
22	915	0	2	55	0	2013/1/4	68	13	0
23	916	0	2	55	0	2013/2/4	64	9	0
24	917	0	2	48	0	2013/1/8	62	14	0
25	918	0	2	47	1	#####	57	10	0
26	919	1	2	68	0	2013/1/3	85	17	0
27	920	0	2	44	0	2013/1/2	57	13	0
28	921	1	2	66	0	2013/2/2	71	5	0
29	922	1	2	72	1	2012/9/11	76	4	1
30	923	0	2	69	1	2012/8/22	81	12	1
31	924	1	2	62	1	2012/6/20	65	3	0
32	925	0	2	50	0	2013/1/11	62	12	0
33	926	1	2	74	0	2013/1/10	80	6	0
34	927	0	2	67	0	2012/1/4	77	10	1
35	928	1	2	64	1	2012/1/24	73	9	0
36	929	0	2	62	0	2013/2/2	72	10	0
37	930	0	2	58	0	2013/1/2	61	3	0
38	931	0	2	64	0	2012/2/16	68	4	0
39	932	1	2	46	1	2013/1/27	52	6	0
40	933	0	2	52	0	2013/1/14	57	5	0
41	934	0	2	55	0	2012/1/12	64	9	0
42	935	0	2	50	0	2013/1/3	60	10	0
43	936	1	2	50	0	2012/1/6	58	8	0
44	937	0	2	56	0	2013/1/18	65	9	0
45	938	0	2	41	0	2012/1/6	54	13	0
46	939	0	2	70	0	2013/1/2	75	5	1
47	940	1	2	83	0	2012/2/15	87	4	0
48	941	0	2	59	0	2012/1/7	66	7	0
49	942	0	2	64	0	2013/1/11	78	14	0
50	943	0	2	74	0	#####	74	0	0
51	944	0	2	33	0	2012/1/6	43	10	0
52	945	0	2	60	0	2012/1/6	72	12	0
53	946	0	2	75	0	2013/2/6	86	11	0
54	947	0	2	49	0	2012/1/6	64	15	0
55	948	0	2	64	0	2012/8/28	64	0	0
56	949	1	2	75	1	2013/6/21	77	2	0
57	950	0	2	53	0	2013/1/3	66	13	0
58	951	0	2	47	0	2012/1/3	64	17	0

1									
2									
3	952	1	2	65	0	2012/1/5	82	17	0
4	953	0	2	60	0	2013/1/3	73	13	0
5	954	0	2	52	1	2012/1/3	69	17	0
6	955	0	2	53	0	2012/1/12	59	6	0
7	956	0	2	52	1	2012/2/15	54	2	0
8	957	0	2	67	0	2013/2/18	72	5	0
9	958	1	2	56	1	2012/8/7	73	17	0
10	959	0	2	66	1	#####	73	7	1
11	960	0	2	63	1	2013/12/2	76	13	0
12	961	0	2	69	0	2012/3/14	86	17	0
13	962	0	2	48	1	2013/10/1	48	0	1
14	963	0	2	41	0	2013/1/17	54	13	0
15	964	0	2	44	0	2012/3/30	44	0	0
16	965	0	2	56	0	2012/1/11	63	7	0
17	966	0	2	55	0	2013/3/11	57	2	0
18	967	0	2	41	0	2012/1/3	55	14	0
19	968	0	2	35	0	2013/1/9	52	17	0
20	969	0	2	53	0	2012/1/3	64	11	0
21	970	0	2	70	0	2013/1/24	79	9	0
22	971	0	2	73	0	2013/1/2	79	6	0
23	972	0	2	58	1	2013/7/17	76	18	0
24	973	0	2	70	0	2013/8/16	70	0	0
25	974	0	2	40	0	2013/1/7	58	18	1
26	975	0	2	85	0	2013/1/25	92	7	0
27	976	0	2	70	0	2012/1/6	73	3	1
28	977	0	2	47	0	2013/1/11	60	13	0
29	978	0	2	63	0	2013/1/11	71	8	1
30	979	1	2	47	1	2012/10/6	59	12	0
31	980	0	2	61	0	2012/1/31	66	5	0
32	981	0	2	58	1	2013/5/3	76	18	0
33	982	0	2	47	0	2012/1/2	59	12	0
34	983	1	2	63	0	2013/1/4	71	8	0
35	984	1	2	59	0	2013/2/26	72	13	0
36	985	0	2	56	0	2012/1/5	59	3	0
37	986	0	2	69	0	2012/2/24	77	8	0
38	987	0	2	44	0	2012/1/6	52	8	0
39	988	0	2	49	0	2013/1/2	66	17	0
40	989	0	2	52	0	2012/1/9	61	9	0
41	990	0	2	54	0	2013/1/2	60	6	0
42	991	0	2	51	0	2012/1/13	58	7	0
43	992	1	2	71	0	2012/1/26	80	9	0
44	993	0	2	51	0	2012/1/17	64	13	1
45	994	0	2	66	0	2013/1/16	72	6	0
46	995	0	2	71	0	2013/1/3	77	6	0
47	996	0	2	56	0	2013/1/10	58	2	1
48	997	0	2	51	0	2013/2/5	61	10	0
49	998	0	2	49	0	2013/1/10	54	5	0
50	999	0	2	50	1	2012/5/1	55	5	0
51	1000	0	2	51	0	2013/1/4	69	18	0
52	1001	0	2	63	0	2012/1/3	76	13	0
53	1002	0	2	61	0	2013/1/8	71	10	0
54	1003	0	2	49	0	2013/1/2	60	11	0
55	1004	1	2	58	0	2012/1/12	59	1	0
56	1005	0	2	32	0	2013/1/4	49	17	0
57	1006	0	2	46	0	2012/1/6	63	17	0
58	1007	0	2	42	0	2012/3/7	48	6	0

1								
2								
3	1008	0	2	59	1 2012/11/8	76	17	1
4	1009	0	2	44	0 2012/1/6	56	12	0
5	1010	0	2	59	0 2013/3/15	69	10	0
6	1011	0	2	63	0 2013/1/8	81	18	0
7	1012	1	2	70	1 2012/2/11	87	17	1
8	1013	1	2	73	0 2013/1/2	79	6	0
9	1014	1	2	50	0 2013/1/3	52	2	0
10	1015	0	2	58	0 2013/3/8	69	11	0
11	1016	0	2	70	0 2012/1/14	82	12	0
12	1017	1	2	54	1 2013/3/16	55	1	1
13	1018	0	2	55	1 2013/3/20	73	18	1
14	1019	0	2	85	1 2012/6/14	94	9	0
15	1020	0	2	39	1 2013/9/10	50	11	0
16	1021	1	2	66	0 2012/1/10	74	8	1
17	1022	1	2	65	0 2012/1/3	82	17	0
18	1023	1	2	69	0 2012/1/13	71	2	1
19	1024	0	2	41	0 2013/1/25	43	2	0
20	1025	1	2	53	0 2012/1/11	60	7	0
21	1026	0	2	39	0 2013/1/15	43	4	0
22	1027	0	2	52	0 2013/1/6	65	13	0
23	1028	1	2	72	1 2012/3/6	73	1	0
24	1029	0	2	51	0 2013/1/28	69	18	0
25	1030	0	2	47	0 2013/2/19	65	18	0
26	1031	1	2	58	0 2012/1/3	65	7	0
27	1032	1	2	62	1 2013/7/3	63	1	0
28	1033	0	2	47	0 2013/1/7	54	7	0
29	1034	0	2	65	0 2013/1/4	72	7	0
30	1035	0	2	59	1 2012/8/17	74	15	0
31	1036	0	2	71	0 2013/1/22	73	2	0
32	1037	0	2	61	0 2013/1/4	66	5	0
33	1038	0	2	57	0 2013/1/7	69	12	0
34	1039	1	2	53	0 2013/1/10	71	18	0
35	1040	0	2	51	1 2012/3/7	52	1	0
36	1041	0	2	58	0 2013/1/2	67	9	1
37	1042	0	2	65	1 2013/5/13	73	8	0
38	1043	0	2	36	0 2013/3/5	50	14	0
39	1044	0	2	68	1 2012/1/6	74	6	0
40	1045	0	2	55	0 2013/1/21	64	9	0
41	1046	0	2	56	0 2013/1/4	61	5	0
42	1047	0	2	56	0 2012/1/2	57	1	0
43	1048	0	2	57	0 2013/1/2	68	11	0
44	1049	0	2	48	0 2012/1/1	55	7	0
45	1050	0	2	49	0 2012/1/20	54	5	0
46	1051	0	2	70	0 2013/1/5	73	3	1
47	1052	1	2	59	0 2012/1/16	61	2	0
48	1053	0	2	57	0 2013/3/11	69	12	0
49	1054	0	2	50	0 2013/1/14	53	3	0
50	1055	0	2	77	0 2012/1/6	84	7	0
51	1056	0	2	63	0 2012/1/4	70	7	1
52	1057	1	2	51	0 2013/1/2	63	12	0
53	1058	0	2	63	1 2013/10/8	69	6	0
54	1059	1	2	69	1 2013/2/4	76	7	0
55	1060	1	2	69	0 2013/1/1	70	1	0
56	1061	0	2	73	0 2012/1/4	80	7	0
57	1062	0	2	50	0 2013/1/11	63	13	0
58	1063	1	2	61	0 2013/1/3	76	15	0

1									
2									
3	1064	0	2	44	0	2012/1/16	54	10	0
4	1065	1	2	66	1	2012/9/10	78	12	0
5	1066	1	2	55	0	2012/2/16	57	2	0
6	1067	0	2	45	0	2013/1/3	60	15	0
7	1068	0	2	63	0	2012/1/2	64	1	0
8	1069	0	2	52	0	2013/1/28	54	2	0
9	1070	0	2	38	0	2013/1/22	47	9	0
10	1071	0	2	51	1	2012/4/20	64	13	0
11	1072	1	2	64	0	2013/1/4	79	15	1
12	1073	0	2	56	0	2013/1/12	63	7	0
13	1074	1	2	74	0	2013/1/18	79	5	0
14	1075	0	2	44	0	2012/2/10	61	17	0
15	1076	0	2	62	0	2013/1/8	71	9	0
16	1077	0	2	57	0	2012/1/20	69	12	0
17	1078	0	2	43	0	2013/1/21	48	5	0
18	1079	0	2	61	1	2013/3/4	70	9	1
19	1080	0	2	46	0	2012/1/6	52	6	0
20	1081	1	2	44	0	2012/1/18	56	12	0
21	1082	0	2	69	0	2012/2/9	73	4	1
22	1083	1	2	67	0	#####	67	0	0
23	1084	0	2	59	0	2013/1/3	69	10	0
24	1085	0	2	43	0	2012/6/1	43	0	0
25	1086	1	2	59	0	2013/2/4	62	3	0
26	1087	1	2	55	0	2012/6/18	57	2	0
27	1088	0	2	79	1	2012/2/11	82	3	0
28	1089	1	2	60	0	2013/1/12	69	9	0
29	1090	0	2	65	1	2013/9/3	76	11	0
30	1091	1	2	64	0	2013/3/13	72	8	0
31	1092	1	2	67	1	2012/8/27	80	13	1
32	1093	1	2	70	0	2013/1/2	84	14	0
33	1094	0	2	48	0	2013/1/4	52	4	0
34	1095	1	2	64	1	2012/3/22	76	12	0
35	1096	0	2	70	0	2012/1/5	75	5	0
36	1097	0	2	58	0	2012/1/13	68	10	0
37	1098	0	2	49	0	2013/1/4	53	4	0
38	1099	0	2	73	1	2013/7/14	78	5	0
39	1100	1	2	47	0	2012/1/11	57	10	0
40	1101	1	2	65	0	2012/1/2	82	17	0
41	1102	0	2	59	0	2013/1/11	72	13	0
42	1103	0	2	62	0	2012/1/11	68	6	0
43	1104	0	2	49	0	2012/1/6	58	9	0
44	1105	0	2	59	0	2013/1/4	65	6	0
45	1106	0	2	40	0	2012/1/19	46	6	0
46	1107	0	2	65	0	2013/1/4	75	10	0
47	1108	0	2	50	0	2013/2/18	61	11	0
48	1109	0	2	71	0	2013/1/3	80	9	0
49	1110	0	2	60	0	2012/1/5	70	10	0
50	1111	0	2	52	0	2013/1/4	57	5	0
51	1112	1	2	58	0	2012/1/7	72	14	0
52	1113	0	2	55	0	2013/1/29	61	6	0
53	1114	0	2	65	0	2013/1/4	70	5	1
54	1115	1	2	65	0	2012/5/30	82	17	0
55	1116	0	2	44	1	2012/6/22	44	0	0
56	1117	0	2	58	0	2012/1/4	75	17	0
57	1118	0	2	68	0	2012/1/5	77	9	0
58	1119	0	2	31	1	2012/3/12	43	12	0

1									
2									
3	1120	0	2	72	0	2012/1/18	72	0	0
4	1121	1	2	48	0	2012/1/20	52	4	0
5	1122	1	2	54	0	2013/2/5	61	7	0
6	1123	0	2	49	0	2012/5/1	49	0	0
7	1124	1	2	60	0	2012/1/2	66	6	1
8	1125	0	2	59	0	2012/1/6	67	8	0
9	1126	0	2	56	0	2012/3/6	64	8	0
10	1127	0	2	53	0	2013/1/30	60	7	0
11	1128	0	2	65	0	2012/3/8	73	8	0
12	1129	0	2	52	1	2012/7/28	52	0	0
13	1130	0	2	58	0	2013/1/8	71	13	0
14	1131	1	2	56	1	2013/9/14	71	15	0
15	1132	0	2	80	0	2013/1/7	92	12	0
16	1133	0	2	62	0	2012/1/2	71	9	0
17	1134	1	2	74	0	2013/1/3	78	4	1
18	1135	1	2	67	0	2012/1/2	78	11	0
19	1136	1	2	48	0	2012/1/2	53	5	0
20	1137	1	2	67	0	2012/1/12	81	14	0
21	1138	1	2	37	0	2012/3/5	42	5	0
22	1139	1	2	63	0	2012/1/9	67	4	0
23	1140	1	2	48	0	2013/6/21	48	0	0
24	1141	0	2	53	0	2012/1/7	59	6	0
25	1142	0	2	54	1	2012/5/21	65	11	0
26	1143	1	2	60	1	2012/1/13	62	2	0
27	1144	1	2	37	1	2012/12/9	42	5	0
28	1145	1	2	51	1	2013/10/4	63	12	1
29	1146	0	2	78	1	2013/9/25	82	4	0
30	1147	1	2	70	0	2012/1/7	83	13	1
31	1148	0	2	82	0	2012/1/5	86	4	0
32	1149	1	2	48	0	2013/2/18	48	0	0
33	1150	0	2	52	0	2013/1/7	54	2	1
34	1151	1	2	69	0	2012/4/18	80	11	0
35	1152	0	2	52	0	2012/1/10	60	8	0
36	1153	0	2	52	0	2012/2/29	53	1	0
37	1154	0	2	56	0	2012/1/10	73	17	0
38	1155	1	2	63	1	2013/8/23	77	14	1
39	1156	0	2	61	1	2013/5/28	74	13	0
40	1157	0	2	57	0	2013/1/5	70	13	1
41	1158	1	2	70	0	2012/2/14	77	7	0
42	1159	0	2	84	0	2013/1/22	86	2	1
43	1160	0	2	51	0	2013/1/9	69	18	0
44	1161	0	2	81	0	2013/1/8	83	2	0
45	1162	1	2	69	1	2013/7/24	76	7	0
46	1163	0	2	40	0	2012/1/4	56	16	0
47	1164	0	2	63	0	2012/1/5	71	8	0
48	1165	0	2	58	0	2013/1/5	66	8	0
49	1166	0	2	38	1	2013/7/10	48	10	0
50	1167	0	2	62	1	2012/3/16	79	17	0
51	1168	0	2	56	1	2013/5/13	70	14	0
52	1169	0	2	58	0	2012/1/4	71	13	0
53	1170	0	2	34	1	2012/1/2	38	4	1
54	1171	0	2	51	0	2012/1/5	59	8	0
55	1172	0	2	53	1	#####	53	0	1
56	1173	0	2	65	1	2012/4/6	70	5	1
57	1174	1	2	66	0	2012/1/3	75	9	0
58	1175	1	2	81	1	2013/7/22	82	1	0

1									
2									
3	1176	0	2	65	0	2013/1/3	70	5	0
4	1177	1	2	55	1	2012/9/13	58	3	1
5	1178	1	2	68	0	2012/1/18	75	7	0
6	1179	0	2	53	1	#####	71	18	1
7	1180	0	2	51	0	2013/1/8	58	7	0
8	1181	0	2	30	0	2012/2/17	37	7	0
9	1182	1	2	53	0	2012/1/2	60	7	0
10	1183	1	2	57	0	2013/1/26	71	14	0
11	1184	1	2	64	0	2012/2/3	72	8	0
12	1185	0	2	54	0	2013/1/7	65	11	0
13	1186	0	2	63	0	2013/1/11	72	9	0
14	1187	1	2	72	0	2012/1/25	76	4	1
15	1188	0	2	47	0	2012/1/11	59	12	0
16	1189	0	2	58	0	2013/1/2	69	11	0
17	1190	1	2	68	1	#####	73	5	0
18	1191	0	2	52	0	2013/1/7	65	13	0
19	1192	0	2	55	1	2013/9/24	65	10	0
20	1193	0	2	71	0	2012/1/17	84	13	0
21	1194	0	2	69	0	2012/1/10	77	8	0
22	1195	1	2	68	0	2012/1/9	70	2	0
23	1196	0	2	56	0	2013/1/14	62	6	0
24	1197	0	2	38	1	2012/4/11	49	11	0
25	1198	0	2	39	0	2013/1/21	45	6	0
26	1199	1	2	65	0	2012/2/23	73	8	1
27	1200	0	2	32	0	2012/9/24	37	5	0
28	1201	0	2	55	0	2013/1/8	66	11	0
29	1202	1	2	66	0	2012/1/10	67	1	0
30	1203	0	2	70	1	#####	81	11	1
31	1204	0	2	60	0	2013/1/15	60	0	0
32	1205	0	2	47	0	2012/1/16	64	17	0
33	1206	1	2	44	0	2012/2/14	48	4	0
34	1207	1	2	57	0	2013/1/21	68	11	0
35	1208	1	2	47	0	2012/1/10	57	10	0
36	1209	0	2	57	1	#####	62	5	0
37	1210	1	2	71	0	2013/1/11	72	1	0
38	1211	1	2	49	1	2013/5/21	64	15	0
39	1212	0	2	62	1	2013/4/24	77	15	0
40	1213	1	2	50	0	2012/1/13	52	2	0
41	1214	0	2	48	0	2013/2/6	55	7	0
42	1215	0	2	31	0	2013/1/14	42	11	0
43	1216	0	2	64	0	2013/1/22	70	6	0
44	1217	0	2	56	0	2013/1/4	58	2	0
45	1218	0	2	73	0	2013/7/30	73	0	0
46	1219	0	2	47	0	2012/1/6	57	10	0
47	1220	1	2	44	0	2012/1/10	57	13	0
48	1221	0	2	57	1	2013/8/27	75	18	0
49	1222	0	2	83	0	2012/1/2	92	9	1
50	1223	0	2	54	0	2013/9/16	54	0	0
51	1224	1	2	71	0	2013/1/9	72	1	0
52	1225	1	2	51	0	2012/1/10	64	13	0
53	1226	1	2	58	0	2013/1/4	59	1	0
54	1227	0	2	51	0	2012/1/10	67	16	0
55	1228	1	2	42	1	2012/5/7	57	15	0
56	1229	0	2	44	0	2013/2/20	62	18	0
57	1230	0	2	49	0	2013/1/10	63	14	0
58	1231	0	2	51	0	2012/2/9	58	7	0



1									
2									
3	1232	0	2	59	0	2013/1/8	69	10	0
4	1233	1	2	54	0	2012/1/10	62	8	0
5	1234	0	2	75	0	2013/3/2	81	6	0
6	1235	0	2	32	1	2013/1/23	49	17	1
7	1236	0	2	64	0	2013/1/11	69	5	0
8	1237	1	2	56	1	#####	74	18	0
9	1238	1	2	50	0	2013/1/8	62	12	0
10	1239	0	2	51	1	2012/3/27	58	7	0
11	1240	0	2	47	1	2013/9/18	49	2	0
12	1241	0	2	50	0	2013/1/5	53	3	0
13	1242	1	2	54	0	2013/1/5	57	3	0
14	1243	0	2	63	1	2012/7/8	65	2	0
15	1244	0	2	51	0	2013/1/8	61	10	0
16	1245	1	2	59	0	2013/1/11	72	13	0
17	1246	0	2	36	0	2012/1/6	38	2	0
18	1247	0	2	64	0	2012/1/3	80	16	1
19	1248	1	2	62	1	2013/6/6	80	18	1
20	1249	0	2	54	0	2013/1/18	64	10	0
21	1250	1	2	50	0	2012/7/2	55	5	0
22	1251	0	2	47	1	#####	65	18	0
23	1252	0	2	58	0	2013/1/22	71	13	0
24	1253	0	2	59	0	2013/1/15	76	17	0
25	1254	1	2	54	0	2012/2/17	59	5	0
26	1255	1	2	43	0	2013/3/7	54	11	0
27	1256	0	2	43	0	2013/1/7	44	1	0
28	1257	0	2	57	0	2013/2/8	68	11	0
29	1258	1	2	66	1	#####	84	18	0
30	1259	0	2	64	0	2013/1/4	70	6	0
31	1260	0	2	61	1	2013/6/11	62	1	0
32	1261	0	2	52	0	2012/1/1	67	15	0
33	1262	0	2	60	0	2013/1/2	70	10	0
34	1263	1	2	68	0	2012/2/11	74	6	0
35	1264	1	2	64	0	2012/1/9	70	6	0
36	1265	1	2	60	0	#####	60	0	0
37	1266	0	2	60	0	2013/1/2	71	11	0
38	1267	0	2	57	0	2012/1/28	58	1	0
39	1268	0	2	69	0	2013/1/25	77	8	0
40	1269	0	2	62	0	2013/1/14	72	10	0
41	1270	1	2	54	0	2012/1/2	62	8	0
42	1271	0	2	75	1	2013/3/27	76	1	0
43	1272	0	2	50	1	#####	62	12	1
44	1273	0	2	58	0	2013/1/4	71	13	0
45	1274	0	2	60	0	2013/1/15	71	11	0
46	1275	0	2	68	0	2013/1/2	81	13	0
47	1276	0	2	70	0	2013/1/16	76	6	0
48	1277	0	2	34	0	2012/1/6	39	5	0
49	1278	0	2	60	0	2013/1/7	66	6	0
50	1279	0	2	49	0	2012/1/3	51	2	0
51	1280	1	2	38	0	2012/1/16	47	9	0
52	1281	0	2	62	1	2013/9/19	75	13	0
53	1282	0	2	42	0	2013/1/3	54	12	0
54	1283	1	2	34	0	2012/1/4	38	4	0
55	1284	0	2	57	0	2012/1/10	63	6	1
56	1285	0	2	56	0	2013/2/23	68	12	0
57	1286	0	2	42	1	#####	58	16	0
58	1287	0	2	56	0	2013/1/12	68	12	0

1									
2									
3	1288	1	2	53	0	2012/1/12	54	1	0
4	1289	0	2	56	0	2012/5/23	70	14	0
5	1290	0	2	66	0	2012/1/1	70	4	1
6	1291	0	2	39	1	#####	56	17	0
7	1292	0	2	55	0	2012/1/4	57	2	1
8	1293	1	2	49	0	2012/1/28	57	8	0
9	1294	0	2	75	0	2012/5/21	75	0	0
10	1295	0	2	25	0	2013/3/25	40	15	0
11	1296	1	2	58	0	2013/1/4	63	5	0
12	1297	0	2	37	0	2013/1/4	55	18	0
13	1298	0	2	68	0	2012/1/3	74	6	1
14	1299	0	2	61	1	2013/9/14	64	3	0
15	1300	0	2	57	0	2013/1/11	65	8	0
16	1301	1	2	63	0	2012/1/7	70	7	0
17	1302	0	2	47	0	2012/9/6	47	0	0
18	1303	1	2	58	0	2012/1/12	71	13	0
19	1304	0	2	58	1	#####	69	11	0
20	1305	0	2	66	1	2012/3/26	83	17	1
21	1306	1	2	66	0	2013/1/11	76	10	0
22	1307	0	2	66	0	2013/1/7	78	12	0
23	1308	0	2	37	0	2012/1/3	47	10	0
24	1309	0	2	43	0	2012/1/28	48	5	0
25	1310	1	2	50	0	2012/1/7	60	10	0
26	1311	0	2	50	0	2013/1/1	58	8	0
27	1312	0	2	75	1	2012/5/22	85	10	0
28	1313	0	2	62	0	2012/1/18	70	8	0
29	1314	0	2	66	1	2013/9/2	66	0	1
30	1315	0	2	48	0	2012/2/4	63	15	0
31	1316	0	2	61	0	2012/1/9	70	9	1
32	1317	1	2	46	0	2013/1/25	58	12	0
33	1318	0	2	62	0	2013/1/23	65	3	0
34	1319	0	2	67	0	2012/1/2	76	9	0
35	1320	1	2	56	0	2013/1/1	57	1	0
36	1321	0	2	48	1	2012/11/5	48	0	0
37	1322	0	2	64	0	2012/1/2	71	7	0
38	1323	0	2	44	0	2013/1/1	62	18	0
39	1324	0	2	54	0	2013/1/28	58	4	0
40	1325	0	2	45	0	2013/1/12	58	13	0
41	1326	1	2	65	0	2012/1/10	66	1	0
42	1327	0	2	54	0	2012/7/4	54	0	1
43	1328	1	2	47	0	2013/1/16	53	6	0
44	1329	0	2	71	0	2012/2/10	76	5	0
45	1330	0	2	61	1	2012/4/3	74	13	0
46	1331	0	2	10	0	2012/1/10	24	14	0
47	1332	0	2	45	0	2013/1/18	59	14	0
48	1333	0	2	71	0	2012/1/14	76	5	0
49	1334	0	2	46	0	2013/1/25	64	18	0
50	1335	0	2	51	0	2013/1/14	62	11	0
51	1336	0	2	65	0	2013/2/2	71	6	0
52	1337	0	2	51	0	2013/1/9	62	11	0
53	1338	1	2	65	0	2012/1/21	76	11	0
54	1339	0	2	69	0	2013/1/18	75	6	0
55	1340	0	2	56	1	2012/5/24	60	4	0
56	1341	1	2	37	1	2012/7/12	50	13	0
57	1342	0	2	42	0	2012/1/11	59	17	0
58	1343	0	2	54	1	2013/3/29	65	11	1

1									
2									
3	1344	0	2	42	0	2012/1/6	51	9	0
4	1345	0	2	44	1	2012/1/11	61	17	0
5	1346	0	2	44	1	2013/2/27	52	8	0
6	1347	0	2	62	1	2013/4/18	75	13	0
7	1348	0	2	60	0	#####	60	0	0
8	1349	0	2	70	1	#####	76	6	0
9	1350	0	2	66	1	2013/8/27	80	14	0
10	1351	0	2	72	0	2013/1/2	78	6	0
11	1352	1	2	46	0	2012/7/31	54	8	0
12	1353	0	2	78	1	#####	78	0	1
13	1354	0	2	65	1	2013/8/26	77	12	0
14	1355	1	2	68	0	2012/7/4	68	0	1
15	1356	0	2	71	0	2012/1/31	77	6	0
16	1357	0	2	72	0	2013/1/22	72	0	1
17	1358	1	2	66	1	2013/1/24	72	6	0
18	1359	1	2	64	0	2012/2/6	69	5	1
19	1360	1	2	65	0	2013/1/28	76	11	1
20	1361	1	2	76	0	2012/2/10	82	6	1
21	1362	0	2	63	1	2013/2/14	81	18	0
22	1363	1	2	57	0	2013/1/2	69	12	0
23	1364	1	2	62	0	2012/2/9	68	6	0
24	1365	1	2	48	0	2013/1/5	59	11	0
25	1366	1	2	74	0	2012/1/19	76	2	0
26	1367	0	2	41	0	2012/1/5	58	17	0
27	1368	0	2	67	1	2012/8/7	75	8	0
28	1369	1	2	68	1	2012/6/28	80	12	0
29	1370	0	2	46	0	2013/3/11	55	9	0
30	1371	1	2	71	0	2012/1/13	75	4	0
31	1372	1	2	82	0	2013/1/15	83	1	0
32	1373	1	2	55	0	2013/1/8	66	11	0
33	1374	0	2	71	1	2012/1/19	86	15	0
34	1375	1	2	43	0	2012/1/3	54	11	0
35	1376	0	2	59	0	2013/1/8	75	16	0
36	1377	1	2	46	1	2013/8/7	50	4	0
37	1378	0	2	66	0	2013/1/5	78	12	0
38	1379	0	2	15	1	2012/5/1	25	10	0
39	1380	0	2	58	0	2013/2/24	69	11	0
40	1381	0	2	61	0	2012/1/17	68	7	0
41	1382	0	2	66	1	2013/5/17	84	18	0
42	1383	0	2	56	0	2012/1/18	67	11	0
43	1384	0	2	77	1	#####	78	1	0
44	1385	1	2	73	0	2012/1/12	76	3	0
45	1386	1	2	61	1	2012/7/16	69	8	1
46	1387	0	2	71	0	2013/1/7	80	9	0
47	1388	0	2	77	0	2012/1/8	84	7	0
48	1389	1	2	66	0	2013/1/19	70	4	0
49	1390	0	2	30	0	2013/2/22	40	10	0
50	1391	0	2	46	0	2012/1/4	52	6	0
51	1392	0	2	64	0	2012/1/4	81	17	1
52	1393	0	2	65	1	2012/1/31	75	10	0
53	1394	0	2	69	0	2013/1/3	76	7	0
54	1395	0	2	57	0	2012/1/13	74	17	0
55	1396	1	2	71	0	2012/2/20	83	12	0
56	1397	0	2	63	0	2013/1/3	73	10	0
57	1398	0	2	56	0	2013/1/8	62	6	1
58	1399	1	2	61	0	2012/3/7	69	8	0

1									
2									
3	1400	1	2	70	0	2013/1/3	76	6	0
4	1401	1	2	46	0	2013/7/8	46	0	0
5	1402	0	2	69	0	2013/9/26	69	0	1
6	1403	0	2	53	0	2012/9/12	53	0	0
7	1404	0	2	70	0	2013/2/16	77	7	0
8	1405	0	2	49	0	2012/3/1	56	7	0
9	1406	1	2	80	0	#####	80	0	1
10	1407	1	2	64	0	2013/1/7	74	10	1
11	1408	0	2	47	0	2013/2/8	61	14	0
12	1409	1	2	63	0	2012/1/7	73	10	1
13	1410	0	2	60	0	2013/8/19	60	0	0
14	1411	0	2	76	0	2013/2/4	82	6	0
15	1412	0	2	66	0	2013/1/4	75	9	0
16	1413	0	2	55	0	2013/1/9	73	18	0
17	1414	1	2	43	0	2012/1/13	50	7	0
18	1415	0	2	67	1	2013/9/23	73	6	1
19	1416	0	2	61	0	2012/1/2	72	11	0
20	1417	0	2	52	0	2012/1/21	60	8	0
21	1418	0	2	48	0	2012/1/5	55	7	0
22	1419	0	2	48	0	2012/2/3	54	6	0
23	1420	1	2	63	0	2013/1/8	64	1	0
24	1421	0	2	72	1	2013/3/1	73	1	0
25	1422	1	2	82	0	2013/8/8	82	0	1
26	1423	0	2	60	0	2013/1/5	61	1	0
27	1424	0	2	54	1	2013/1/30	58	4	0
28	1425	0	2	48	0	2013/1/7	49	1	0
29	1426	0	2	58	0	2012/1/2	67	9	0
30	1427	0	2	56	0	2013/1/10	69	13	0
31	1428	0	2	54	0	2012/1/10	64	10	0
32	1429	0	2	41	0	2013/1/14	54	13	0
33	1430	0	2	62	0	2013/1/17	73	11	0
34	1431	1	2	58	0	2013/1/21	64	6	0
35	1432	1	2	70	0	2012/1/19	83	13	0
36	1433	0	2	55	0	2013/1/10	66	11	0
37	1434	0	2	56	1	#####	63	7	0
38	1435	0	2	70	0	2012/1/2	76	6	0
39	1436	1	2	47	0	2013/1/7	58	11	1
40	1437	1	2	51	0	2013/2/5	60	9	0
41	1438	0	2	82	0	2012/2/10	91	9	0
42	1439	0	2	49	0	2012/1/3	62	13	0
43	1440	0	2	55	0	2013/1/5	73	18	0
44	1441	0	2	54	0	2013/1/14	61	7	0
45	1442	1	2	54	0	2013/1/7	61	7	1
46	1443	0	2	59	0	2013/1/24	74	15	1
47	1444	1	2	64	0	2013/1/4	67	3	0
48	1445	0	2	52	0	2013/1/22	61	9	0
49	1446	0	2	42	0	2012/5/12	59	17	0
50	1447	0	2	52	0	2012/1/9	56	4	0
51	1448	0	2	79	0	2013/3/30	91	12	0
52	1449	0	2	51	0	2012/2/3	60	9	0
53	1450	1	2	70	0	2012/1/3	82	12	0
54	1451	0	2	74	0	2012/1/9	82	8	0
55	1452	0	2	72	0	2012/1/9	76	4	0
56	1453	1	2	58	1	2012/3/7	60	2	0
57	1454	0	2	43	0	2013/1/4	51	8	0
58	1455	0	2	33	0	2012/1/5	40	7	0

1									
2									
3	1456	0	2	54	0	2013/1/2	67	13	0
4	1457	1	2	65	0	2013/1/2	81	16	0
5	1458	0	2	31	0	2013/1/17	48	17	0
6	1459	1	2	32	0	2012/1/4	49	17	0
7	1460	0	2	69	0	2012/1/19	77	8	0
8	1461	0	3	70	0	2013/2/4	70	0	0
9	1462	1	3	70	0	2013/3/8	76	6	0
10	1463	1	3	48	0	2013/1/30	48	0	0
11	1464	1	3	54	0	2012/2/2	58	4	0
12	1465	1	3	76	0	2012/1/5	80	4	0
13	1466	0	3	51	0	#####	51	0	0
14	1467	0	3	56	0	2012/1/28	69	13	0
15	1468	1	3	51	0	2012/1/11	52	1	0
16	1469	0	3	53	1	2012/5/10	53	0	0
17	1470	0	3	63	0	2013/1/2	66	3	0
18	1471	0	3	53	0	2013/1/9	59	6	0
19	1472	0	3	59	0	2013/1/10	76	17	0
20	1473	1	3	36	0	2013/2/2	49	13	0
21	1474	0	3	50	0	2012/1/17	58	8	0
22	1475	1	3	31	1	2013/4/26	31	0	0
23	1476	0	3	59	0	2012/1/30	64	5	0
24	1477	0	3	48	0	2012/1/4	61	13	0
25	1478	0	3	37	0	2013/1/15	48	11	0
26	1479	0	3	43	0	2012/1/24	54	11	0
27	1480	1	3	63	1	2013/3/23	65	2	1
28	1481	0	3	59	0	2012/1/14	61	2	0
29	1482	0	3	54	0	2012/1/12	62	8	0
30	1483	0	3	60	0	2012/1/16	64	4	0
31	1484	0	3	51	0	2013/1/7	57	6	0
32	1485	0	3	47	0	2013/7/11	47	0	0
33	1486	0	3	67	0	2013/1/24	68	1	0
34	1487	0	3	48	0	2012/1/5	59	11	0
35	1488	0	3	53	0	2012/1/19	58	5	0
36	1489	0	3	61	1	2012/12/3	61	0	0
37	1490	1	3	66	0	2013/1/15	67	1	0
38	1491	0	3	51	0	2013/1/4	61	10	0
39	1492	0	3	48	1	#####	58	10	0
40	1493	0	3	68	0	2013/1/2	73	5	0
41	1494	1	3	67	1	2013/1/9	73	6	1
42	1495	0	3	58	0	2013/1/8	65	7	0
43	1496	1	3	36	0	2013/5/13	49	13	0
44	1497	1	3	75	0	2012/1/3	79	4	0
45	1498	0	3	72	0	2013/1/15	78	6	0
46	1499	1	3	22	1	2013/1/25	24	2	0
47	1500	1	3	22	0	2013/2/15	25	3	0
48	1501	1	3	69	0	2012/1/17	74	5	0
49	1502	0	3	25	0	2012/4/28	31	6	0
50	1503	1	3	76	0	2012/1/17	77	1	0
51	1504	1	3	64	0	2012/1/11	69	5	0
52	1505	1	3	72	1	2012/6/1	72	0	0
53	1506	1	3	32	0	2013/1/7	34	2	0
54	1507	0	3	45	1	2012/8/7	52	7	1
55	1508	0	3	48	0	2012/1/2	58	10	0
56	1509	1	3	39	0	2013/1/8	43	4	0
57	1510	1	3	64	0	2013/4/23	64	0	0
58	1511	1	3	42	0	2013/1/7	46	4	0

1									
2									
3	1512	0	3	37	0	2012/1/18	43	6	0
4	1513	0	3	33	0	2013/1/3	45	12	0
5	1514	0	3	58	0	2012/2/1	64	6	0
6	1515	0	3	67	1	2012/8/30	68	1	1
7	1516	0	3	72	1	2013/10/7	75	3	0
8	1517	0	3	35	0	2012/1/3	41	6	0
9	1518	0	3	43	1	2013/3/5	61	18	0
10	1519	1	3	63	0	#####	63	0	0
11	1520	1	3	55	1	#####	59	4	0
12	1521	0	3	56	0	2012/1/11	56	0	0
13	1522	0	3	72	1	#####	72	0	0
14	1523	1	3	51	0	2012/1/20	58	7	0
15	1524	1	3	50	0	2012/1/7	51	1	0
16	1525	0	3	54	0	2012/3/7	60	6	0
17	1526	1	3	71	0	2012/1/7	77	6	0
18	1527	0	3	46	0	2012/1/16	54	8	0
19	1528	1	3	70	1	2012/8/20	71	1	0
20	1529	0	3	36	0	2013/1/9	54	18	0
21	1530	1	3	58	0	2012/1/27	59	1	0
22	1531	1	3	64	0	2012/1/4	65	1	0
23	1532	0	3	69	0	2012/1/9	71	2	0
24	1533	0	3	57	0	2013/1/8	60	3	1
25	1534	0	3	43	0	2013/1/16	61	18	0
26	1535	0	3	50	0	2013/2/25	55	5	0
27	1536	0	3	25	0	2012/1/3	30	5	0
28	1537	0	3	49	0	2012/2/8	54	5	0
29	1538	1	3	49	0	2012/1/18	53	4	0
30	1539	0	3	50	0	2012/1/12	56	6	0
31	1540	1	3	60	1	2012/8/7	60	0	0
32	1541	0	3	47	0	2013/1/17	65	18	0
33	1542	0	3	66	0	2012/2/13	69	3	0
34	1543	1	3	55	0	2012/1/13	56	1	1
35	1544	0	3	36	0	2012/2/13	37	1	0
36	1545	0	3	49	0	2012/2/14	66	17	0
37	1546	0	3	40	1	#####	58	18	0
38	1547	1	3	63	0	2012/1/11	68	5	0
39	1548	1	3	73	1	2012/3/21	75	2	0
40	1549	0	3	28	0	2012/2/6	30	2	0
41	1550	0	3	40	0	2012/1/14	42	2	0
42	1551	0	3	58	0	2013/5/7	58	0	0
43	1552	0	3	47	1	2012/2/15	57	10	1
44	1553	0	3	60	0	2012/1/4	64	4	0
45	1554	1	3	54	0	2012/1/3	55	1	0
46	1555	1	3	37	1	2013/5/2	43	6	0
47	1556	0	3	60	0	2012/2/14	61	1	0
48	1557	0	3	40	0	2013/1/7	55	15	0
49	1558	1	3	70	0	2012/1/7	74	4	0
50	1559	0	3	68	0	2013/1/2	73	5	0
51	1560	0	3	56	1	2012/3/13	60	4	0
52	1561	0	3	58	0	2012/1/3	60	2	0
53	1562	1	3	37	0	2013/2/26	46	9	0
54	1563	1	3	51	1	2012/2/11	52	1	0
55	1564	1	3	32	0	2013/1/1	33	1	0
56	1565	1	3	52	0	2012/1/27	58	6	0
57	1566	0	3	45	0	2013/1/8	63	18	0
58	1567	1	3	46	0	2013/10/6	46	0	0

1									
2									
3	1568	0	3	23	0	2012/2/7	30	7	0
4	1569	0	3	56	0	2013/1/11	70	14	0
5	1570	1	3	68	0	2013/1/2	74	6	0
6	1571	1	3	73	0	2013/1/23	75	2	0
7	1572	0	3	24	0	2012/1/31	32	8	0
8	1573	0	3	61	0	2012/1/9	68	7	0
9	1574	0	3	36	0	2013/1/4	54	18	1
10	1575	0	3	56	1	2013/11/5	74	18	0
11	1576	1	3	52	0	2012/1/10	55	3	0
12	1577	0	3	27	1	#####	29	2	0
13	1578	1	3	57	0	2012/2/20	61	4	0
14	1579	0	3	65	1	2013/8/16	68	3	0
15	1580	1	3	45	0	2013/2/19	56	11	0
16	1581	0	3	65	0	2012/1/6	69	4	0
17	1582	0	3	50	0	2013/1/23	59	9	0
18	1583	1	3	76	1	#####	77	1	1
19	1584	0	3	40	0	2013/2/15	43	3	0
20	1585	1	3	42	0	2013/1/7	57	15	0
21	1586	1	3	55	1	2012/8/30	55	0	0
22	1587	0	3	49	1	#####	62	13	1
23	1588	0	3	45	0	2013/1/2	48	3	0
24	1589	0	3	53	0	2012/1/11	60	7	0
25	1590	0	3	43	0	2012/1/20	55	12	0
26	1591	0	3	72	0	2013/1/9	74	2	0
27	1592	0	3	23	0	2012/1/18	28	5	0
28	1593	0	3	53	0	2012/8/24	68	15	0
29	1594	1	3	39	1	2013/7/6	53	14	0
30	1595	1	3	31	0	2013/1/6	32	1	0
31	1596	0	3	64	0	2013/1/2	71	7	0
32	1597	1	3	47	0	2013/11/8	47	0	0
33	1598	1	3	21	0	2013/5/22	26	5	0
34	1599	1	3	66	0	2012/6/21	66	0	1
35	1600	0	3	25	0	2012/1/9	28	3	0
36	1601	0	3	55	1	2012/3/20	56	1	1
37	1602	1	3	53	0	2012/2/1	53	0	0
38	1603	0	3	51	0	2013/2/19	61	10	0
39	1604	0	3	38	0	2013/2/4	52	14	0
40	1605	0	3	22	0	2012/1/10	27	5	0
41	1606	0	3	57	1	#####	69	12	1
42	1607	0	3	49	0	2012/1/10	54	5	0
43	1608	1	3	49	0	2012/1/2	55	6	0
44	1609	0	3	43	0	2013/7/12	43	0	0
45	1610	1	3	54	0	2012/1/5	55	1	0
46	1611	0	3	61	1	2012/7/7	63	2	0
47	1612	1	3	47	0	#####	47	0	0
48	1613	0	3	30	1	2012/7/19	34	4	0
49	1614	0	3	62	0	2013/1/4	68	6	0
50	1615	0	3	43	0	2012/1/5	57	14	0
51	1616	1	3	51	0	2012/1/2	52	1	0
52	1617	1	3	73	0	2012/1/3	78	5	0
53	1618	0	3	42	0	2012/5/18	52	10	1
54	1619	1	3	29	0	2013/1/3	33	4	0
55	1620	0	3	38	0	2012/1/2	44	6	0
56	1621	1	3	58	0	2012/1/4	61	3	0
57	1622	0	3	47	1	2012/6/5	64	17	0
58	1623	1	3	43	0	2012/2/21	46	3	0

1									
2									
3	1624	0	3	45	0	2013/1/7	63	18	0
4	1625	0	3	58	0	2012/1/3	72	14	1
5	1626	0	3	44	1	2013/7/7	45	1	0
6	1627	0	3	59	0	2012/1/8	63	4	0
7	1628	0	3	59	0	2012/2/22	64	5	0
8	1629	1	3	61	0	2012/4/16	63	2	0
9	1630	1	3	59	0	2013/1/3	62	3	0
10	1631	0	3	46	0	2012/1/9	58	12	0
11	1632	0	3	68	0	2012/8/13	68	0	0
12	1633	0	3	50	0	2012/1/3	52	2	0
13	1634	1	3	55	1	2012/9/10	55	0	0
14	1635	0	3	54	0	2012/1/4	60	6	0
15	1636	0	3	62	0	2012/1/2	68	6	1
16	1637	1	3	60	0	2012/1/6	63	3	0
17	1638	0	3	55	0	2012/1/4	56	1	0
18	1639	0	3	46	0	2013/2/14	51	5	0
19	1640	0	3	31	0	2012/1/16	34	3	0
20	1641	0	3	28	0	2012/1/5	32	4	0
21	1642	1	3	48	1	2013/1/16	48	0	0
22	1643	1	3	65	0	2012/1/12	69	4	0
23	1644	1	3	24	0	2013/2/26	28	4	0
24	1645	0	3	63	0	2012/1/11	68	5	0
25	1646	0	3	67	1	2012/7/5	67	0	1
26	1647	0	3	64	0	2013/10/9	66	2	0
27	1648	1	3	70	0	2012/1/2	71	1	1
28	1649	1	3	24	0	2013/1/2	25	1	0
29	1650	1	3	73	0	2012/4/3	73	0	0
30	1651	1	3	56	0	2012/1/20	57	1	1
31	1652	0	3	61	0	2012/1/9	62	1	0
32	1653	0	3	54	0	2012/1/16	59	5	0
33	1654	0	3	41	0	2012/1/18	54	13	0
34	1655	1	3	48	1	#####	48	0	0
35	1656	0	3	61	0	2012/1/3	70	9	0
36	1657	0	3	60	1	2012/4/5	65	5	0
37	1658	1	3	57	0	2012/1/10	58	1	0
38	1659	0	3	44	0	2012/2/17	61	17	0
39	1660	1	3	74	0	2012/1/5	75	1	1
40	1661	0	3	38	1	2013/11/5	48	10	0
41	1662	0	3	49	0	2012/2/27	50	1	0
42	1663	1	3	70	0	2012/9/5	70	0	1
43	1664	0	3	24	0	2012/1/4	28	4	0
44	1665	1	3	57	0	2012/3/8	57	0	0
45	1666	1	3	61	0	2013/1/7	69	8	0
46	1667	1	3	45	0	2013/5/9	45	0	0
47	1668	0	3	59	0	2013/1/23	75	16	0
48	1669	0	3	29	1	#####	29	0	0
49	1670	0	3	63	0	2013/1/4	78	15	1
50	1671	0	3	59	0	2012/1/30	66	7	1
51	1672	1	3	42	0	2013/2/28	46	4	0
52	1673	0	3	53	0	2013/1/7	62	9	0
53	1674	1	3	51	0	2012/1/21	53	2	0
54	1675	0	3	67	1	2012/10/9	67	0	0
55	1676	1	3	67	1	2012/3/23	67	0	0
56	1677	0	3	58	0	2012/2/13	66	8	0
57	1678	0	3	41	1	2012/5/29	45	4	0
58	1679	0	3	59	0	2012/1/2	64	5	1



1									
2									
3	1680	0	3	52	1 2013/7/1	53	1	0	
4	1681	0	3	49	0 2013/3/18	50	1	0	
5	1682	0	3	57	0 2012/1/7	58	1	0	
6	1683	1	3	56	0 2012/1/17	62	6	0	
7	1684	1	3	59	0 #####	59	0	1	
8	1685	0	3	56	0 2013/1/7	56	0	0	
9	1686	0	3	56	0 2012/5/2	56	0	0	
10	1687	0	3	61	0 2012/1/17	63	2	0	
11	1688	0	3	56	0 2012/2/21	59	3	0	
12	1689	1	3	67	0 2012/1/4	70	3	0	
13	1690	0	3	48	0 2013/2/22	63	15	0	
14	1691	0	3	50	0 2012/1/2	55	5	0	
15	1692	0	3	71	0 2013/8/7	71	0	0	
16	1693	0	3	54	1 #####	56	2	0	
17	1694	0	3	39	0 2013/2/7	45	6	0	
18	1695	1	3	75	0 2012/2/17	78	3	0	
19	1696	0	4	38	0 2012/1/12	43	5	0	
20	1697	0	4	41	0 2012/2/22	43	2	0	
21	1698	1	4	58	0 2013/12/3	58	0	0	
22	1699	0	4	38	1 2013/12/9	39	1	0	
23	1700	0	4	49	1 2012/7/19	52	3	0	
24	1701	0	4	35	0 2012/3/12	44	9	0	
25	1702	1	4	57	0 2013/1/25	59	2	0	
26	1703	0	4	55	0 2012/1/16	56	1	0	
27	1704	0	4	45	0 2013/1/10	47	2	1	
28	1705	0	4	40	0 2013/1/2	42	2	0	
29	1706	1	4	51	0 2012/3/23	60	9	0	
30	1707	0	4	43	0 2012/1/6	48	5	0	
31	1708	1	4	50	0 2013/1/18	55	5	0	
32	1709	0	4	50	1 2013/5/3	50	0	0	
33	1710	0	4	27	0 2012/1/4	35	8	0	
34	1711	1	4	54	0 2012/1/5	60	6	0	
35	1712	1	4	60	0 #####	60	0	0	
36	1713	1	4	53	0 2013/1/8	60	7	0	
37	1714	1	4	69	0 2013/1/8	70	1	0	
38	1715	1	4	48	0 2013/1/4	53	5	0	
39	1716	1	4	53	1 2013/8/6	56	3	1	
40	1717	1	4	43	0 2013/1/28	44	1	0	
41	1718	0	4	39	1 2012/2/20	44	5	0	
42	1719	0	4	51	0 2013/2/4	51	0	0	
43	1720	1	4	71	1 2013/11/6	71	0	1	
44	1721	0	4	52	1 2013/9/12	57	5	1	
45	1722	0	4	38	1 2013/7/22	38	0	0	
46	1723	0	4	46	0 2012/1/2	47	1	0	
47	1724	0	4	38	0 2012/1/17	48	10	0	
48	1725	0	4	34	0 2013/3/19	34	0	0	
49	1726	1	4	62	0 2013/4/17	62	0	0	
50	1727	1	4	62	1 2013/12/3	62	0	0	
51	1728	0	4	44	0 2012/1/16	45	1	0	
52	1729	1	4	65	0 #####	65	0	0	
53	1730	1	4	32	0 2012/1/9	39	7	0	
54	1731	0	4	34	0 2012/2/18	43	9	0	
55	1732	0	4	43	0 2012/1/20	46	3	0	
56	1733	0	4	39	0 2012/1/10	43	4	0	
57	1734	1	4	40	0 2013/1/4	44	4	0	
58	1735	1	4	72	0 2013/1/21	73	1	0	

1									
2									
3	1736	0	4	21	0	2012/3/12	30	9	0
4	1737	0	4	46	1	2012/8/17	46	0	0
5	1738	0	4	40	0	2012/1/13	46	6	0
6	1739	1	4	69	1	2013/12/9	69	0	0
7	1740	0	4	50	0	2013/5/17	50	0	0
8	1741	0	4	46	0	2013/3/11	46	0	0
9	1742	0	4	45	0	2012/3/13	54	9	0
10	1743	0	4	32	0	2012/1/7	40	8	0
11	1744	0	4	44	1	2012/4/14	44	0	0
12	1745	1	4	63	0	2013/1/1	64	1	0
13	1746	1	4	67	0	#####	67	0	0
14	1747	0	4	47	0	2012/1/3	55	8	0
15	1748	0	4	48	0	2012/1/9	50	2	0
16	1749	0	4	42	0	2013/1/9	44	2	0
17	1750	1	4	53	0	#####	57	4	0
18	1751	1	4	57	0	2013/1/12	58	1	0
19	1752	1	4	43	1	2013/6/24	44	1	1
20	1753	0	4	52	0	2013/1/28	53	1	0
21	1754	0	4	50	0	2012/1/6	55	5	0
22	1755	0	4	53	0	2012/9/20	58	5	0
23	1756	0	4	56	0	2013/11/6	56	0	1
24	1757	0	4	42	0	2012/1/2	47	5	0
25	1758	0	4	53	1	2012/3/4	54	1	0
26	1759	0	4	47	1	2012/7/27	53	6	0
27	1760	1	4	67	0	2013/6/3	67	0	0
28	1761	0	4	29	0	2012/3/5	29	0	0
29	1762	0	4	51	1	2012/2/2	53	2	0
30	1763	0	4	19	0	2012/1/3	31	12	0
31	1764	1	4	50	0	2012/1/13	59	9	0
32	1765	0	4	33	0	2013/1/9	36	3	0
33	1766	0	4	32	0	2012/7/24	32	0	0
34	1767	1	4	41	0	2013/1/17	42	1	0
35	1768	0	4	41	0	2012/1/2	42	1	0
36	1769	0	4	51	0	#####	51	0	0
37	1770	0	4	44	0	2012/1/14	48	4	1
38	1771	0	4	38	0	2013/2/23	40	2	0
39	1772	0	4	28	1	2012/9/12	28	0	0
40	1773	0	4	38	0	2013/2/6	45	7	0
41	1774	1	4	63	0	2013/5/1	63	0	0
42	1775	1	4	57	0	2013/1/9	62	5	0
43	1776	0	4	55	0	2012/3/1	55	0	0
44	1777	1	4	58	0	2012/1/4	59	1	0
45	1778	0	4	40	0	2012/1/3	44	4	0
46	1779	1	4	74	0	2013/6/19	74	0	0
47	1780	1	4	47	0	2013/1/23	56	9	0
48	1781	1	4	56	0	2013/9/3	56	0	0
49	1782	1	4	55	1	2012/9/27	57	2	0
50	1783	0	4	26	0	2012/1/11	35	9	0
51	1784	1	4	68	0	2013/6/7	68	0	0
52	1785	0	4	44	0	#####	44	0	0
53	1786	1	4	44	1	2012/6/16	56	12	0
54	1787	0	4	49	0	2012/1/3	52	3	0
55	1788	0	4	42	0	2012/3/7	53	11	0
56	1789	1	4	33	0	2012/1/18	35	2	0
57	1790	1	4	53	1	2013/11/6	58	5	1
58	1791	0	4	55	0	2013/1/3	57	2	0

1									
2									
3	1792	0	4	36	0 2012/1/30	46	10	0	
4	1793	1	4	55	0 2012/1/11	59	4	0	
5	1794	0	4	47	0 2012/1/10	49	2	0	
6	1795	1	4	64	0 2013/9/10	64	0	0	
7	1796	1	4	46	0 2012/2/29	54	8	0	
8	1797	0	4	58	0 2013/7/8	58	0	0	
9	1798	0	4	52	0 2012/1/31	56	4	0	
10	1799	0	4	39	0 2012/1/12	47	8	0	
11	1800	0	4	46	0 2012/2/6	53	7	0	
12	1801	1	4	40	0 2012/4/17	40	0	0	
13	1802	0	4	26	0 2012/1/2	39	13	0	
14	1803	1	4	74	0 2013/1/28	75	1	0	
15	1804	1	4	60	1 2013/2/14	60	0	0	
16	1805	0	4	42	1 2012/9/22	44	2	0	
17	1806	0	4	49	0 2012/2/27	53	4	0	
18	1807	0	4	54	0 2013/1/3	55	1	0	
19	1808	0	4	25	1 2012/5/2	34	9	0	
20	1809	1	4	35	1 2012/2/7	38	3	0	
21	1810	0	4	33	0 2012/1/4	38	5	0	
22	1811	1	4	43	0 2012/7/20	53	10	0	
23	1812	0	4	44	0 2012/2/13	51	7	0	
24	1813	0	4	36	0 2012/1/21	46	10	0	
25	1814	0	4	55	1 2013/2/21	55	0	0	
26	1815	1	4	47	0 2013/1/5	56	9	0	
27	1816	0	4	46	0 2012/1/20	49	3	0	
28	1817	0	4	38	1 2013/7/13	41	3	0	
29	1818	0	4	38	0 2013/1/5	43	5	0	
30	1819	0	4	28	0 2012/1/17	40	12	0	
31	1820	0	4	44	0 2012/1/17	49	5	0	
32	1821	0	4	19	0 2012/1/11	36	17	0	
33	1822	0	4	41	0 2013/1/16	44	3	0	
34	1823	0	4	32	0 2013/1/2	37	5	0	
35	1824	0	4	43	1 2012/5/29	50	7	0	
36	1825	0	4	49	0 2013/1/23	50	1	0	
37	1826	0	4	24	0 2012/1/12	27	3	0	
38	1827	0	4	34	0 2013/1/8	36	2	0	
39	1828	1	4	41	0 2012/3/22	41	0	0	
40	1829	0	4	27	0 2012/1/5	31	4	0	
41	1830	0	4	39	0 2013/4/10	39	0	0	
42	1831	0	4	49	0 2013/1/7	58	9	0	
43	1832	0	4	24	1 2012/9/17	37	13	0	
44	1833	1	4	47	0 2013/7/10	47	0	0	
45	1834	0	4	53	0 2012/1/3	56	3	0	
46	1835	1	4	54	0 2013/1/21	55	1	0	
47	1836	0	5	39	0 2012/1/2	41	2	0	
48	1837	1	5	46	1 2013/10/1	52	6	0	
49	1838	1	5	64	0 2012/3/6	67	3	0	
50	1839	1	5	23	0 2012/1/16	27	4	0	
51	1840	0	5	43	0 2012/1/5	46	3	0	
52	1841	0	5	18	0 2012/1/16	22	4	0	
53	1842	0	5	50	1 2013/6/14	50	0	0	
54	1843	1	5	46	0 2013/3/15	47	1	0	
55	1844	0	5	54	0 2013/1/26	57	3	0	
56	1845	0	5	47	0 2013/1/11	51	4	0	
57	1846	1	5	69	0 2012/1/18	71	2	0	
58	1847	1	5	46	0 2013/1/1	56	10	0	

1									
2									
3	1848	0	5	54	0	2012/1/20	57	3	1
4	1849	0	5	63	0	2012/1/9	67	4	0
5	1850	0	5	51	0	2013/1/3	56	5	0
6	1851	0	5	64	0	2013/1/14	66	2	0
7	1852	0	5	40	0	2012/1/2	42	2	0
8	1853	0	5	38	0	2013/1/3	47	9	0
9	1854	1	5	49	1	2013/10/2	49	0	1
10	1855	0	5	46	0	2013/2/18	47	1	0
11	1856	0	5	43	1	2012/10/5	43	0	0
12	1857	0	5	48	0	2012/1/3	50	2	0
13	1858	0	5	71	0	2013/1/7	78	7	0
14	1859	1	5	52	0	2013/1/7	54	2	0
15	1860	0	5	57	0	2012/1/4	58	1	1
16	1861	0	5	38	1	2013/7/9	48	10	0
17	1862	0	5	68	1	2013/4/23	78	10	0
18	1863	0	5	41	0	2013/1/23	48	7	0
19	1864	1	5	40	0	2013/1/14	49	9	1
20	1865	1	5	51	0	2012/1/5	64	13	0
21	1866	1	5	27	0	2012/8/23	27	0	1
22	1867	1	5	52	0	2012/1/16	65	13	0
23	1868	0	5	59	0	2012/1/9	64	5	0
24	1869	0	5	45	0	2012/1/3	50	5	0
25	1870	0	5	56	0	2012/1/11	57	1	0
26	1871	0	5	46	0	2013/1/7	47	1	0
27	1872	0	5	59	0	2013/1/4	67	8	0
28	1873	0	5	37	0	2013/1/4	49	12	0
29	1874	1	5	52	0	2012/2/1	63	11	0
30	1875	0	5	55	1	2013/9/27	57	2	0
31	1876	0	5	53	1	2012/12/8	54	1	1
32	1877	0	5	54	0	2013/1/2	57	3	0
33	1878	0	5	47	0	2012/2/17	52	5	0
34	1879	0	5	48	0	2013/1/1	53	5	0
35	1880	0	5	57	0	2013/3/25	62	5	0
36	1881	0	5	64	0	2013/2/6	64	0	0
37	1882	0	5	47	0	2012/1/11	51	4	0
38	1883	0	5	64	0	2013/1/2	68	4	0
39	1884	1	5	67	0	2012/1/9	70	3	0
40	1885	1	5	67	1	#####	70	3	0
41	1886	0	5	17	0	2012/1/10	19	2	0
42	1887	1	5	66	0	2012/2/15	71	5	0
43	1888	1	5	48	0	2013/1/4	51	3	0
44	1889	0	5	64	0	2013/1/7	74	10	0
45	1890	1	5	41	0	2013/1/7	45	4	0
46	1891	1	5	24	0	2012/1/3	26	2	0
47	1892	1	5	50	0	2013/1/25	52	2	0
48	1893	0	5	49	1	2012/11/5	52	3	0
49	1894	0	5	61	0	2013/1/14	66	5	0
50	1895	0	5	48	0	2013/6/5	48	0	0
51	1896	0	5	60	1	2013/6/18	64	4	0
52	1897	0	5	58	0	2013/1/3	60	2	0
53	1898	1	5	52	0	2012/1/9	63	11	0
54	1899	0	5	20	1	#####	20	0	0
55	1900	0	5	58	0	2012/1/3	64	6	0
56	1901	0	5	20	0	2012/1/12	22	2	0
57	1902	1	5	23	1	2012/12/9	24	1	0
58	1903	0	5	44	0	2013/1/29	50	6	1

1									
2									
3	1904	0	5	46	0	2012/1/4	47	1	0
4	1905	0	5	66	1	2013/8/22	66	0	0
5	1906	0	5	62	0	2013/2/21	62	0	0
6	1907	0	5	21	0	2012/1/11	22	1	0
7	1908	0	5	68	0	2012/1/5	69	1	0
8	1909	0	5	57	0	2012/1/3	58	1	0
9	1910	0	5	70	0	2013/2/4	79	9	0
10	1911	1	5	50	1	#####	63	13	0
11	1912	0	5	70	0	2013/3/25	79	9	0
12	1913	1	5	47	0	2013/1/15	52	5	0
13	1914	0	5	66	1	2012/3/6	68	2	0
14	1915	1	5	25	0	#####	25	0	0
15	1916	0	6	70	0	2013/1/19	73	3	0
16	1917	0	6	37	0	2012/3/23	42	5	0
17	1918	0	6	65	0	2012/1/3	70	5	0
18	1919	1	6	65	0	2012/1/20	72	7	0
19	1920	0	6	48	0	2012/1/12	50	2	0
20	1921	0	6	68	0	2013/1/3	72	4	0
21	1922	0	6	69	1	2013/12/5	72	3	0
22	1923	0	6	31	0	2012/7/6	38	7	0
23	1924	0	6	39	0	2012/3/5	53	14	0
24	1925	0	6	59	0	2012/1/4	66	7	0
25	1926	0	6	50	0	2012/3/27	50	0	0
26	1927	0	6	36	0	2013/1/26	39	3	0
27	1928	0	6	72	0	2012/1/13	74	2	0
28	1929	0	6	31	0	2012/2/10	37	6	0
29	1930	0	6	38	0	2013/2/15	41	3	0
30	1931	0	6	49	1	2012/4/25	56	7	0
31	1932	0	6	48	0	2013/1/7	51	3	0
32	1933	1	6	67	1	2013/8/7	72	5	1
33	1934	0	6	37	0	2012/2/1	41	4	0
34	1935	0	6	39	0	2013/1/28	47	8	0
35	1936	0	6	68	0	2012/1/3	76	8	1
36	1937	0	6	48	0	2012/2/15	48	0	0
37	1938	0	6	38	0	2013/2/4	43	5	0
38	1939	0	6	33	0	2013/2/19	33	0	0
39	1940	0	6	46	0	2012/1/11	53	7	0
40	1941	0	6	68	0	2012/1/7	69	1	0
41	1942	0	6	46	0	2013/1/30	54	8	0
42	1943	0	6	44	1	#####	48	4	1
43	1944	0	6	37	0	2012/2/25	41	4	0
44	1945	1	6	67	0	2013/1/3	72	5	0
45	1946	0	6	64	0	2013/9/20	64	0	1
46	1947	0	6	73	0	2013/1/4	76	3	0
47	1948	0	6	76	0	2012/1/4	81	5	0
48	1949	0	6	56	0	2013/1/5	59	3	0
49	1950	1	6	63	0	2013/1/2	67	4	0
50	1951	0	6	63	0	2013/4/25	63	0	0
51	1952	0	6	54	0	2012/5/29	54	0	0
52	1953	0	6	80	0	2012/1/12	81	1	0
53	1954	0	6	60	0	2013/1/11	64	4	0
54	1955	0	6	49	0	2013/1/9	58	9	0
55	1956	0	6	43	0	2012/1/13	50	7	0
56	1957	1	6	70	1	#####	74	4	1
57	1958	0	6	56	0	2012/1/17	63	7	0
58	1959	0	6	28	0	2012/1/3	34	6	0

1									
2									
3	1960	0	6	55	0	2012/1/9	68	13	0
4	1961	1	6	74	1	2012/1/25	79	5	1
5	1962	0	6	56	0	2012/1/9	64	8	0
6	1963	0	6	62	0	2012/8/27	62	0	0
7	1964	0	6	37	0	#####	37	0	0
8	1965	0	6	52	0	2013/1/9	59	7	0
9	1966	0	6	45	0	2012/9/7	45	0	0
10	1967	0	6	55	0	#####	55	0	0
11	1968	0	6	34	0	2013/1/3	42	8	0
12	1969	0	6	51	1	2013/4/23	54	3	0
13	1970	0	6	47	0	2012/12/4	47	0	0
14	1971	0	6	41	0	2013/1/5	46	5	0
15	1972	0	6	37	0	2013/1/2	39	2	0
16	1973	0	6	36	1	2012/8/15	45	9	0
17	1974	0	6	65	0	2012/1/11	71	6	0
18	1975	0	6	50	0	2012/1/13	56	6	0
19	1976	0	6	61	0	2012/2/15	67	6	0
20	1977	0	6	30	0	2013/3/7	31	1	0
21	1978	0	6	49	0	2013/1/31	49	0	0
22	1979	0	6	79	0	2012/6/29	79	0	0
23	1980	1	6	46	0	2012/1/2	56	10	0
24	1981	0	6	43	0	2012/1/13	48	5	0
25	1982	0	6	65	0	2012/1/4	71	6	0
26	1983	0	6	54	0	2013/7/25	54	0	0
27	1984	0	6	55	1	2012/7/6	55	0	0
28	1985	0	6	40	0	2013/2/1	48	8	0
29	1986	1	6	78	0	2012/1/2	82	4	1
30	1987	0	6	70	0	2012/1/17	71	1	1
31	1988	0	6	40	1	2012/4/18	47	7	0
32	1989	0	6	74	0	2013/7/8	74	0	0
33	1990	0	6	75	1	2012/10/6	79	4	1
34	1991	0	6	49	0	2013/1/10	58	9	0
35	1992	0	6	54	0	2013/6/27	55	1	0
36	1993	0	6	60	0	2013/1/14	64	4	0
37	1994	0	6	58	0	2012/1/4	68	10	1
38	1995	0	6	58	1	2012/1/18	61	3	0
39	1996	1	6	82	0	2012/1/9	83	1	0
40	1997	0	6	58	0	2013/4/22	58	0	0
41	1998	0	6	48	0	2012/1/5	53	5	0
42	1999	0	6	38	1	#####	42	4	0
43	2000	1	6	73	0	2012/9/28	73	0	0
44	2001	1	6	78	0	2013/8/28	78	0	0
45	2002	0	6	58	0	2013/8/1	58	0	0
46	2003	0	6	58	0	2012/1/2	59	1	0
47	2004	1	6	48	0	2012/1/3	51	3	0
48	2005	0	6	65	0	2013/4/1	68	3	0
49	2006	0	6	49	1	2013/3/7	50	1	0
50	2007	0	6	62	1	#####	64	2	0
51	2008	0	6	65	0	2013/1/9	67	2	0
52	2009	0	6	57	0	2012/2/17	66	9	0
53	2010	0	6	63	0	2012/1/2	68	5	0
54	2011	1	6	69	0	2012/1/12	76	7	0
55	2012	0	6	41	1	2013/1/8	51	10	0
56	2013	1	6	68	0	2012/1/5	72	4	0
57	2014	0	6	54	0	2013/1/2	56	2	0
58	2015	0	6	41	0	2013/5/20	50	9	0

1									
2									
3	2016	0	6	52	1	2012/1/20	57	5	1
4	2017	0	6	68	0	2012/1/2	74	6	0
5	2018	0	6	58	0	2013/1/4	65	7	0
6	2019	0	6	51	1	2013/6/20	63	12	0
7	2020	0	6	84	0	2012/1/5	85	1	0
8	2021	0	6	41	0	2012/3/26	49	8	0
9	2022	0	6	63	0	2012/1/10	69	6	0
10	2023	0	6	27	0	2012/2/1	33	6	0
11	2024	1	6	61	0	2013/1/28	63	2	1
12	2025	0	6	78	0	2013/1/2	88	10	0
13	2026	0	6	75	0	2013/1/3	78	3	0
14	2027	0	6	52	0	2013/1/16	59	7	0
15	2028	0	6	49	1	2013/7/3	49	0	0
16	2029	0	6	76	0	2013/1/3	79	3	0
17	2030	0	6	48	0	2013/1/2	56	8	0
18	2031	0	6	58	0	2013/9/11	58	0	0
19	2032	1	6	75	0	2013/1/8	77	2	0
20	2033	0	6	48	0	2012/1/31	48	0	0
21	2034	0	6	52	0	2013/8/6	52	0	0
22	2035	0	6	45	0	2012/1/21	49	4	0
23	2036	0	6	77	0	2013/6/7	77	0	0
24	2037	1	6	65	1	#####	66	1	0
25	2038	0	6	43	0	2013/1/22	49	6	1
26	2039	0	6	58	0	2013/1/25	60	2	0
27	2040	0	6	55	0	2012/1/2	61	6	0
28	2041	0	6	36	1	2012/6/20	36	0	0
29	2042	0	6	64	0	2013/1/10	65	1	0
30	2043	0	6	52	0	2013/1/8	59	7	0
31	2044	0	6	52	1	2013/3/26	57	5	1
32	2045	1	6	68	1	2013/9/1	68	0	1
33	2046	0	6	30	0	2013/1/14	32	2	0
34	2047	0	6	47	0	2012/1/3	49	2	0
35	2048	0	6	48	0	2013/7/10	48	0	0
36	2049	0	6	30	1	2013/7/30	41	11	0
37	2050	0	6	49	0	2013/1/4	52	3	0
38	2051	0	6	78	0	2013/1/3	80	2	1
39	2052	1	6	76	0	2012/1/19	87	11	0
40	2053	1	6	74	1	2012/4/11	84	10	0
41	2054	0	6	56	0	2013/1/2	59	3	0
42	2055	0	6	46	0	2012/1/6	49	3	0
43	2056	0	6	64	1	#####	64	0	1
44	2057	0	6	64	0	2013/10/3	64	0	0
45	2058	0	6	20	1	#####	30	10	0
46	2059	0	6	45	0	2013/1/8	49	4	0
47	2060	0	6	66	1	2012/9/13	66	0	0
48	2061	0	6	80	0	2013/1/2	82	2	0
49	2062	0	6	46	0	2012/1/16	51	5	0
50	2063	0	6	75	0	2013/1/6	76	1	0
51	2064	1	6	44	0	2012/1/11	50	6	0
52	2065	0	6	76	0	2013/1/10	77	1	0
53	2066	0	6	53	0	2013/1/3	54	1	0
54	2067	0	6	49	0	2012/1/10	52	3	0
55	2068	0	6	42	0	2013/1/7	47	5	0
56	2069	0	6	70	1	#####	71	1	1
57	2070	0	6	45	1	#####	45	0	0
58	2071	0	6	74	0	2012/1/1	84	10	0

1									
2									
3	2072	0	6	49	0	2013/10/3	49	0	0
4	2073	0	6	45	0	2012/1/2	49	4	0
5	2074	0	6	42	0	2012/12/5	42	0	0
6	2075	1	6	61	0	2013/1/2	62	1	0
7	2076	0	6	83	0	2012/1/3	86	3	0
8	2077	0	6	58	1	2013/7/4	60	2	0
9	2078	0	6	46	0	2013/3/28	49	3	0
10	2079	0	6	65	1	2012/6/6	70	5	0
11	2080	0	6	44	1	2012/1/6	44	0	1
12	2081	0	6	45	0	2012/1/3	53	8	0
13	2082	0	6	35	1	2012/4/11	43	8	0
14	2083	0	6	46	0	2012/8/6	46	0	0
15	2084	0	6	67	0	2012/1/11	70	3	0
16	2085	0	6	43	1	2013/8/31	43	0	0
17	2086	0	6	69	1	2012/8/14	73	4	1
18	2087	1	6	61	0	2012/1/16	69	8	0
19	2088	1	6	55	0	2012/1/26	59	4	0
20	2089	0	6	51	0	2013/1/17	54	3	0
21	2090	0	6	49	0	2012/6/8	53	4	0
22	2091	0	6	61	0	2012/1/3	64	3	0
23	2092	0	6	50	0	2013/1/12	57	7	0
24	2093	0	6	46	0	2012/1/3	53	7	0
25	2094	0	6	31	0	2012/1/2	37	6	0
26	2095	0	6	46	0	2013/4/26	46	0	0
27	2096	0	6	52	0	#####	52	0	0
28	2097	0	6	55	0	2013/1/3	57	2	0
29	2098	0	6	42	0	2012/1/10	50	8	0
30	2099	0	6	49	0	2013/1/16	55	6	0
31	2100	1	6	54	0	2012/1/16	61	7	0
32	2101	0	6	53	0	2013/1/15	60	7	0
33	2102	0	6	46	0	2012/1/10	53	7	0
34	2103	0	6	76	0	2013/1/4	88	12	0
35	2104	0	6	48	0	2013/5/16	48	0	0
36	2105	0	6	45	0	2012/1/5	50	5	0
37	2106	0	6	63	0	2012/1/11	66	3	0
38	2107	0	6	44	0	2012/1/20	47	3	0
39	2108	0	6	63	0	2012/1/16	66	3	0
40	2109	0	6	59	0	2013/1/2	65	6	0
41	2110	0	6	66	0	2012/1/3	75	9	1
42	2111	0	6	54	0	2012/3/14	60	6	0
43	2112	0	6	63	0	2012/1/18	68	5	0
44	2113	0	6	73	1	2013/6/2	86	13	0
45	2114	0	6	82	0	2012/1/2	84	2	0
46	2115	0	6	30	0	2012/1/3	42	12	0
47	2116	0	6	75	0	2012/2/15	75	0	0
48	2117	0	6	36	0	2012/1/10	48	12	0
49	2118	0	6	52	1	2013/6/9	53	1	0
50	2119	0	6	55	0	2012/1/4	63	8	0
51	2120	0	6	69	1	2012/4/13	80	11	1
52	2121	0	6	68	0	2012/6/18	68	0	0
53	2122	0	6	56	0	2012/1/16	59	3	0
54	2123	0	6	45	0	2013/1/6	51	6	0
55	2124	1	6	63	0	2013/1/4	67	4	0
56	2125	0	6	68	0	2013/1/4	72	4	0
57	2126	0	6	60	0	2012/8/22	60	0	0
58	2127	0	6	59	0	2012/1/14	64	5	0



1									
2									
3	2128	0	6	57	0	2013/1/17	64	7	0
4	2129	0	6	73	0	2012/1/4	75	2	0
5	2130	0	6	66	0	2012/1/6	68	2	0
6	2131	0	6	75	0	2013/2/1	76	1	0
7	2132	0	6	63	0	2012/3/5	63	0	0
8	2133	0	6	86	0	#####	86	0	0
9	2134	0	6	50	0	2013/1/25	56	6	0
10	2135	0	6	63	0	2013/1/10	68	5	0
11	2136	0	6	63	0	2012/2/1	65	2	0
12	2137	0	6	71	1	2012/7/26	73	2	0
13	2138	1	6	63	0	2013/1/2	69	6	0
14	2139	0	6	66	0	2012/3/1	74	8	0
15	2140	0	6	45	0	2013/1/21	60	15	0
16	2141	0	6	70	0	2012/1/3	73	3	0
17	2142	0	6	56	0	2013/1/8	63	7	0
18	2143	0	6	55	0	2013/1/16	62	7	0
19	2144	0	6	64	1	2012/5/15	71	7	0
20	2145	0	6	63	0	2013/1/2	69	6	0
21	2146	1	6	73	0	2013/1/9	78	5	0
22	2147	0	6	62	0	2012/1/2	69	7	0
23	2148	0	6	54	0	2013/1/4	55	1	0
24	2149	0	6	57	0	2013/1/2	68	11	0
25	2150	0	6	48	0	2012/1/12	52	4	0
26	2151	0	6	30	0	2012/3/13	38	8	0
27	2152	0	6	53	1	2012/8/14	53	0	1
28	2153	1	6	62	0	2013/6/28	62	0	0
29	2154	0	6	35	0	2013/3/26	35	0	0
30	2155	0	6	52	0	2012/1/20	56	4	0
31	2156	0	6	74	0	2013/1/15	81	7	0
32	2157	0	6	63	0	2013/1/3	64	1	0
33	2158	0	6	50	0	2013/1/10	58	8	0
34	2159	0	6	53	0	2012/2/6	55	2	0
35	2160	0	6	42	0	2013/1/3	54	12	0
36	2161	0	6	52	0	2013/1/29	59	7	0
37	2162	0	6	44	0	2012/2/20	44	0	0
38	2163	0	6	56	0	2012/1/30	64	8	0
39	2164	0	6	46	0	2013/4/16	53	7	0
40	2165	0	6	74	0	2012/1/14	78	4	0
41	2166	1	6	75	1	2012/4/17	75	0	1
42	2167	1	6	60	0	2013/1/3	63	3	0
43	2168	0	6	53	0	2013/1/7	60	7	0
44	2169	0	6	46	0	2013/2/8	51	5	0
45	2170	0	6	58	0	2012/1/5	59	1	0
46	2171	0	6	45	0	2013/1/5	53	8	0
47	2172	0	6	56	1	2012/3/20	56	0	0
48	2173	0	6	31	0	2013/1/9	31	0	0
49	2174	0	6	59	0	2013/1/3	60	1	0
50	2175	0	6	56	0	2013/1/8	59	3	0
51	2176	0	6	48	0	2013/1/11	49	1	0
52	2177	0	6	57	0	2012/1/3	64	7	0
53	2178	0	6	68	0	2013/1/3	69	1	0
54	2179	0	6	34	0	2013/1/11	40	6	0
55	2180	0	6	50	1	2012/3/16	53	3	0
56	2181	0	6	55	0	2012/1/12	59	4	0
57	2182	1	6	62	0	2013/1/5	64	2	0
58	2183	0	6	54	0	2012/2/7	59	5	0

1									
2									
3	2184	1	6	61	1 #####	72	11	0	
4	2185	0	6	56	0 2012/1/3	63	7	0	
5	2186	0	6	36	0 2012/1/3	48	12	0	
6	2187	1	6	64	0 2013/1/1	66	2	0	
7	2188	1	6	76	0 2013/6/3	76	0	0	
8	2189	0	6	66	0 2013/1/15	69	3	0	
9	2190	0	6	50	0 2012/1/6	56	6	0	
10	2191	0	6	50	0 2012/1/17	53	3	0	
11	2192	0	6	49	0 2013/3/12	55	6	0	
12	2193	0	6	60	0 2012/6/12	60	0	0	
13	2194	0	6	53	1 2013/9/3	66	13	0	
14	2195	0	6	86	0 2013/4/19	86	0	1	
15	2196	0	6	78	0 2012/1/3	83	5	0	
16	2197	0	6	63	1 2012/6/19	65	2	1	
17	2198	0	6	40	1 2013/12/4	45	5	0	
18	2199	0	6	61	0 2013/1/3	66	5	0	
19	2200	0	6	52	1 2013/1/30	55	3	0	
20	2201	0	6	63	1 #####	63	0	0	
21	2202	0	6	65	1 2012/4/21	71	6	0	
22	2203	0	6	59	0 2012/1/20	65	6	1	
23	2204	0	6	68	0 2012/2/9	73	5	0	
24	2205	0	6	66	0 2012/1/16	76	10	0	
25	2206	0	6	73	0 2013/1/3	74	1	0	
26	2207	0	6	37	1 2013/1/29	49	12	0	
27	2208	0	6	40	0 2013/1/8	47	7	0	
28	2209	0	6	68	1 2012/3/22	68	0	0	
29	2210	0	6	39	0 2012/1/9	50	11	0	
30	2211	0	6	72	1 2012/4/29	80	8	0	
31	2212	0	6	50	0 2012/1/4	55	5	0	
32	2213	1	6	60	0 2012/1/20	69	9	0	
33	2214	1	6	74	0 2013/4/18	74	0	0	
34	2215	0	6	43	0 2013/1/9	49	6	0	
35	2216	0	6	50	0 2012/1/2	55	5	0	
36	2217	1	6	64	0 2013/7/4	64	0	0	
37	2218	0	6	50	0 2013/4/23	54	4	0	
38	2219	0	6	37	0 2012/2/16	38	1	0	
39	2220	0	6	41	0 2013/1/7	44	3	0	
40	2221	1	6	64	0 2013/1/7	67	3	0	
41	2222	0	6	69	0 2012/1/5	75	6	0	
42	2223	0	6	43	0 2012/7/30	43	0	0	
43	2224	0	6	64	0 2013/1/4	77	13	0	
44	2225	0	6	50	0 2013/3/2	58	8	0	
45	2226	0	6	55	0 2012/1/10	59	4	0	
46	2227	0	6	43	0 2013/1/2	50	7	0	
47	2228	0	6	63	1 #####	64	1	0	
48	2229	0	6	47	0 2012/6/27	47	0	0	
49	2230	0	6	55	0 2013/1/25	65	10	0	
50	2231	0	6	48	0 2012/1/7	50	2	0	
51	2232	0	6	51	0 2012/1/2	52	1	0	
52	2233	0	6	65	0 2013/5/27	65	0	1	
53	2234	0	6	58	0 2013/1/16	59	1	0	
54	2235	0	6	31	0 2012/1/9	38	7	0	
55	2236	0	6	55	0 2012/1/6	61	6	0	
56	2237	0	6	66	1 #####	75	9	1	
57	2238	0	6	46	0 2012/1/2	48	2	0	
58	2239	1	6	66	0 2013/1/17	67	1	0	

1									
2									
3	2240	0	6	88	1 #####	89	1	0	
4	2241	0	6	79	0 2013/1/7	80	1	0	
5	2242	0	6	46	1 2013/6/28	49	3	0	
6	2243	0	6	82	0 2012/2/2	86	4	0	
7	2244	0	6	55	0 2013/1/9	59	4	0	
8	2245	1	6	65	0 2013/1/1	72	7	0	
9	2246	1	6	80	0 2012/2/16	83	3	0	
10	2247	0	6	77	0 2013/1/8	84	7	0	
11	2248	1	6	49	0 2012/1/14	53	4	1	
12	2249	0	6	60	0 2012/1/18	66	6	0	
13	2250	0	6	47	0 2013/1/21	55	8	1	
14	2251	0	6	43	1 2012/9/11	43	0	0	
15	2252	1	6	58	0 2013/1/8	60	2	0	
16	2253	0	6	40	0 2013/2/8	46	6	0	
17	2254	0	6	47	0 2013/1/7	55	8	0	
18	2255	1	6	80	0 2012/1/9	84	4	0	
19	2256	0	6	51	1 #####	55	4	0	
20	2257	0	6	57	1 2012/3/1	58	1	0	
21	2258	0	6	42	0 2013/2/16	54	12	0	
22	2259	0	6	67	0 2012/1/2	75	8	0	
23	2260	0	6	51	1 2012/6/25	58	7	0	
24	2261	0	6	57	0 2012/1/6	58	1	0	
25	2262	1	6	71	1 2012/8/23	80	9	0	
26	2263	0	6	44	0 2012/1/27	48	4	0	
27	2264	0	6	60	1 2013/11/6	60	0	0	
28	2265	1	6	67	0 2012/1/10	71	4	0	
29	2266	0	6	67	0 2012/1/5	72	5	0	
30	2267	0	6	55	1 2013/6/12	55	0	0	
31	2268	0	6	49	0 2012/1/17	51	2	0	
32	2269	0	6	63	0 2012/4/30	63	0	0	
33	2270	0	6	40	0 2012/1/4	47	7	0	
34	2271	0	6	40	0 2013/5/3	40	0	0	
35	2272	0	6	42	0 2012/2/22	49	7	0	
36	2273	0	6	46	0 2013/1/8	48	2	0	
37	2274	0	6	57	0 2012/1/2	58	1	0	
38	2275	0	6	80	0 2013/1/4	83	3	0	
39	2276	0	6	28	0 2013/3/6	40	12	0	
40	2277	1	6	78	0 2012/1/5	84	6	0	
41	2278	0	6	57	1 #####	57	0	0	
42	2279	0	6	46	0 2013/1/11	53	7	0	
43	2280	0	6	44	1 #####	44	0	0	
44	2281	0	6	58	1 #####	61	3	1	
45	2282	0	6	56	0 2013/1/8	59	3	0	
46	2283	0	6	42	0 2012/2/1	50	8	0	
47	2284	0	6	51	0 2013/1/18	52	1	0	
48	2285	0	6	63	0 2013/1/3	70	7	1	
49	2286	0	6	66	0 2013/1/2	75	9	0	
50	2287	0	6	40	0 2012/1/9	44	4	0	
51	2288	1	6	71	1 2013/5/30	72	1	0	
52	2289	0	6	31	1 2013/3/12	36	5	0	
53	2290	0	6	45	1 2012/5/18	46	1	1	
54	2291	0	6	34	0 2013/1/4	39	5	1	
55	2292	0	6	35	0 2012/1/3	44	9	0	
56	2293	0	6	30	0 2013/1/2	33	3	0	
57	2294	0	6	40	0 2013/1/9	41	1	0	
58	2295	0	6	75	0 2013/9/9	75	0	0	

1								
2								
3	2296	0	6	34	1 2012/2/29	50	16	0
4	2297	0	6	53	0 2012/3/27	53	0	0
5	2298	0	6	56	0 2013/11/7	56	0	0
6	2299	0	6	47	0 2012/2/7	55	8	0
7	2300	0	6	30	0 2012/1/10	32	2	0
8	2301	0	6	40	0 2013/4/13	43	3	0
9	2302	0	6	47	0 2012/6/29	47	0	0
10	2303	0	6	54	0 2013/1/8	56	2	0
11	2304	0	6	55	0 2013/1/4	62	7	0
12	2305	0	6	85	1 2013/7/7	86	1	1
13	2306	1	6	58	0 2012/1/5	66	8	0
14	2307	0	6	77	0 2013/6/15	77	0	0
15	2308	0	6	51	0 2013/7/15	51	0	0
16	2309	0	6	54	0 2012/3/16	57	3	0
17	2310	0	6	58	0 2012/1/1	61	3	0
18	2311	0	6	48	1 2013/4/24	54	6	0
19	2312	0	6	57	0 2012/1/6	62	5	0
20	2313	0	6	30	0 2012/2/2	38	8	1
21	2314	0	6	38	1 2012/9/20	46	8	0
22	2315	0	6	65	0 2012/1/2	71	6	0
23	2316	0	6	70	0 2013/1/3	79	9	0
24	2317	0	6	43	0 2012/4/21	45	2	0
25	2318	0	6	53	1 2013/4/16	53	0	0
26	2319	0	6	39	1 2012/3/14	44	5	0
27	2320	1	6	70	0 2013/6/17	70	0	0
28	2321	0	6	32	0 2012/1/3	38	6	0
29	2322	0	6	53	0 2013/1/7	61	8	1
30	2323	0	6	55	1 2012/3/13	64	9	0
31	2324	1	6	69	0 2013/2/21	71	2	0
32	2325	0	6	40	1 #####	41	1	0
33	2326	0	6	67	0 2012/1/3	72	5	0
34	2327	0	6	69	0 2012/1/2	72	3	0
35	2328	1	6	75	1 2012/3/20	80	5	1
36	2329	0	6	46	0 2013/1/3	53	7	0
37	2330	0	6	74	0 2013/1/18	77	3	0
38	2331	0	6	70	0 2013/1/4	75	5	0
39	2332	0	6	64	0 2013/2/7	71	7	0
40	2333	0	6	65	0 2013/3/1	65	0	0
41	2334	0	6	40	0 2012/1/3	42	2	1
42	2335	0	6	43	0 2012/2/15	48	5	0
43	2336	0	6	58	0 2013/1/22	61	3	0
44	2337	0	6	66	1 #####	75	9	0
45	2338	0	6	50	0 2013/1/15	56	6	0
46	2339	0	6	56	0 2012/1/11	58	2	0
47	2340	0	6	37	0 2013/1/14	45	8	0
48	2341	1	6	55	0 2013/1/2	57	2	0
49	2342	0	6	46	0 2012/1/6	56	10	0
50	2343	0	6	58	0 2013/1/8	64	6	0
51	2344	0	6	43	1 2012/9/24	54	11	0
52	2345	0	6	62	1 2013/7/22	64	2	0
53	2346	0	6	62	0 2013/1/1	64	2	0
54	2347	0	6	77	0 2012/1/3	81	4	0
55	2348	0	6	74	0 #####	74	0	0
56	2349	0	6	41	0 2012/1/11	46	5	0
57	2350	0	6	52	0 2012/1/25	54	2	0
58	2351	1	6	82	0 2012/1/3	84	2	0

1									
2									
3	2352	0	6	41	0	2012/1/4	42	1	0
4	2353	0	6	49	0	2012/1/9	57	8	0
5	2354	0	6	52	0	2012/9/17	52	0	1
6	2355	0	6	48	0	2013/1/3	56	8	0
7	2356	0	6	50	0	2013/1/3	52	2	0
8	2357	1	6	68	0	2013/1/7	69	1	0
9	2358	0	6	49	0	2013/1/2	55	6	1
10	2359	0	6	61	0	2013/1/10	64	3	0
11	2360	0	6	77	0	2013/9/23	77	0	1
12	2361	0	6	49	0	2013/1/18	57	8	1
13	2362	0	6	76	0	2013/1/11	86	10	0
14	2363	0	6	60	0	2012/1/27	62	2	0
15	2364	1	6	54	0	2013/1/21	57	3	0
16	2365	0	6	39	0	2013/1/3	45	6	0
17	2366	0	6	69	0	2013/2/5	71	2	0
18	2367	0	6	47	1	2013/5/8	48	1	1
19	2368	0	6	53	0	2013/1/17	54	1	0
20	2369	0	6	65	0	2012/10/9	65	0	0
21	2370	1	6	59	1	#####	63	4	0
22	2371	0	6	55	0	2013/1/31	61	6	0
23	2372	0	6	57	0	2012/1/16	58	1	0
24	2373	0	6	50	1	2013/9/18	54	4	0
25	2374	0	6	71	1	2013/9/26	78	7	0
26	2375	0	6	48	0	2013/2/18	54	6	0
27	2376	0	6	67	0	2012/1/13	70	3	0
28	2377	1	6	72	0	2013/1/31	77	5	0
29	2378	0	6	48	0	2012/2/2	51	3	0
30	2379	0	6	52	0	2013/1/3	61	9	0
31	2380	0	6	62	0	2012/1/4	63	1	0
32	2381	1	6	61	0	2013/8/29	61	0	0
33	2382	0	6	49	1	2013/9/9	61	12	0
34	2383	0	6	46	0	2012/2/2	53	7	0
35	2384	0	6	59	1	2012/12/5	69	10	0
36	2385	0	6	76	0	2013/2/6	76	0	0
37	2386	0	6	45	0	2012/1/17	51	6	0
38	2387	0	6	33	0	2012/1/16	34	1	0
39	2388	0	6	87	0	2013/5/7	87	0	0
40	2389	0	6	52	0	2013/6/26	52	0	0
41	2390	0	6	52	0	2013/1/11	53	1	0
42	2391	0	6	33	1	2013/5/11	36	3	0
43	2392	0	6	79	0	2013/1/23	79	0	0
44	2393	0	6	35	0	2013/1/2	45	10	0
45	2394	0	6	60	0	2012/1/4	71	11	0
46	2395	0	6	51	0	2012/2/13	52	1	0
47	2396	0	6	60	0	2013/1/3	70	10	0
48	2397	0	6	35	1	2012/7/31	45	10	0
49	2398	0	6	45	0	2013/1/3	47	2	0
50	2399	0	6	78	0	2013/2/7	87	9	0
51	2400	0	6	35	0	2012/1/11	47	12	0
52	2401	0	6	57	1	2013/6/3	59	2	0
53	2402	0	6	54	0	2012/2/6	60	6	0
54	2403	0	6	73	1	2012/9/18	73	0	0
55	2404	0	6	44	0	2012/1/3	49	5	1
56	2405	0	6	65	0	2012/1/10	78	13	0
57	2406	1	6	83	0	2012/1/13	84	1	1
58	2407	0	6	82	1	2013/4/12	83	1	1

1								
2								
3	2408	0	6	56	1 2012/8/13	60	4	0
4	2409	0	6	58	0 2013/2/15	58	0	0
5	2410	0	6	57	0 2013/1/21	69	12	0
6	2411	0	6	46	0 2012/1/30	57	11	0
7	2412	0	6	73	1 2012/4/30	76	3	0
8	2413	1	6	48	1 2012/9/10	54	6	1
9	2414	0	6	73	1 #####	73	0	0
10	2415	0	6	74	1 #####	79	5	0
11	2416	0	6	63	0 2012/1/9	68	5	1
12	2417	0	6	51	0 2012/4/24	59	8	0
13	2418	0	6	83	0 2012/1/2	84	1	0
14	2419	0	6	42	0 2013/1/2	48	6	0
15	2420	0	6	69	1 2013/1/17	69	0	1
16	2421	0	6	54	0 2013/1/4	56	2	0
17	2422	1	6	68	0 2012/2/7	79	11	0
18	2423	0	6	78	1 2012/10/8	83	5	0
19	2424	1	6	71	0 2012/1/9	80	9	0
20	2425	0	6	35	0 2013/1/4	36	1	0
21	2426	0	6	50	0 2013/1/8	56	6	0
22	2427	0	6	36	0 2012/2/6	47	11	0
23	2428	1	6	70	0 2013/7/9	70	0	0
24	2429	0	6	54	1 2013/12/5	62	8	0
25	2430	0	6	44	0 2013/1/3	50	6	0
26	2431	0	6	54	0 2013/6/27	54	0	0
27	2432	0	6	74	0 2013/1/4	76	2	0
28	2433	0	6	27	0 2012/1/6	33	6	0
29	2434	0	6	47	0 2013/1/8	61	14	0
30	2435	0	6	23	0 2013/1/2	28	5	0
31	2436	0	6	74	0 2013/1/10	80	6	0
32	2437	0	6	58	0 2013/2/26	59	1	0
33	2438	0	6	47	0 2013/2/18	53	6	0
34	2439	0	6	71	0 2013/1/4	81	10	0
35	2440	0	6	34	0 2012/7/13	34	0	0
36	2441	0	6	43	0 2012/1/18	51	8	0
37	2442	1	6	69	0 2012/2/23	78	9	0
38	2443	1	6	58	0 2012/1/5	59	1	0
39	2444	0	6	61	0 2012/3/12	63	2	0
40	2445	0	6	55	1 2013/3/28	65	10	0
41	2446	0	6	57	0 2013/3/11	63	6	0
42	2447	0	6	45	0 2012/1/11	48	3	0
43	2448	0	6	54	0 2012/1/7	60	6	0
44	2449	0	6	31	1 2013/4/16	38	7	0
45	2450	0	6	54	0 2013/1/30	59	5	0
46	2451	0	6	54	0 2012/1/18	60	6	0
47	2452	0	6	56	0 2012/1/3	64	8	0
48	2453	0	6	52	0 2013/1/10	61	9	0
49	2454	0	6	62	0 2013/3/23	62	0	0
50	2455	0	6	57	0 2012/1/16	62	5	0
51	2456	1	6	71	0 2012/1/18	74	3	0
52	2457	0	6	72	0 2012/1/2	75	3	0
53	2458	0	6	64	1 2013/1/21	71	7	0
54	2459	0	6	22	0 2012/2/15	34	12	0
55	2460	0	6	55	0 2013/1/4	61	6	0
56	2461	0	6	48	0 2012/1/16	52	4	0
57	2462	0	6	69	0 2012/1/2	77	8	0
58	2463	0	6	54	1 2013/4/29	61	7	0

1									
2									
3	2464	0	6	49	0	2013/12/9	49	0	0
4	2465	0	6	68	0	2013/7/9	68	0	0
5	2466	0	6	71	1	2013/8/19	82	11	1
6	2467	0	6	71	0	2013/1/5	73	2	0
7	2468	0	6	27	1	#####	28	1	0
8	2469	0	6	50	0	2013/1/7	56	6	0
9	2470	0	6	75	0	2012/1/2	76	1	0
10	2471	0	6	39	1	2012/3/20	41	2	1
11	2472	0	6	31	0	2012/1/20	37	6	1
12	2473	0	6	56	0	2012/1/18	57	1	0
13	2474	0	6	38	1	2013/9/9	51	13	1
14	2475	1	6	61	1	2013/4/30	61	0	1
15	2476	0	6	42	1	2013/8/24	43	1	0
16	2477	0	6	55	0	2012/1/20	61	6	0
17	2478	0	6	68	0	2012/1/20	76	8	0
18	2479	0	6	68	0	2013/1/3	72	4	0
19	2480	0	6	58	0	2012/1/13	65	7	1
20	2481	0	6	53	0	2012/1/4	60	7	0
21	2482	0	6	53	1	#####	53	0	0
22	2483	0	6	53	0	2013/1/4	57	4	0
23	2484	1	6	81	0	2012/1/12	84	3	0
24	2485	0	6	49	0	2013/2/6	49	0	0
25	2486	0	6	41	0	2013/1/3	46	5	0
26	2487	0	6	48	0	#####	48	0	0
27	2488	0	6	59	1	2013/1/25	61	2	1
28	2489	0	6	55	0	2012/4/6	59	4	0
29	2490	1	6	77	0	2012/1/7	81	4	0
30	2491	0	6	49	0	2013/1/23	55	6	0
31	2492	0	6	48	0	2013/1/10	53	5	0
32	2493	0	6	58	0	2013/9/18	58	0	0
33	2494	1	6	69	1	2013/7/3	70	1	0
34	2495	0	6	66	0	2012/1/18	76	10	0
35	2496	1	6	77	0	2012/5/23	83	6	0
36	2497	0	6	59	1	2013/6/14	69	10	0
37	2498	0	6	64	0	2012/1/6	67	3	0
38	2499	0	6	56	0	2012/1/9	63	7	0
39	2500	0	6	48	0	2013/1/8	53	5	0
40	2501	0	6	36	0	2013/1/4	38	2	0
41	2502	0	6	71	1	#####	75	4	1
42	2503	1	6	69	0	2012/3/13	78	9	1
43	2504	0	6	81	0	2012/1/2	87	6	0
44	2505	0	6	64	0	2013/1/12	67	3	0
45	2506	0	6	63	1	2013/2/1	71	8	1
46	2507	0	6	71	1	#####	71	0	1
47	2508	0	6	55	0	2013/2/8	55	0	0
48	2509	0	6	37	0	2012/1/1	45	8	0
49	2510	0	6	58	0	2012/1/5	65	7	0
50	2511	0	6	79	0	#####	79	0	0
51	2512	0	6	67	0	2012/8/23	67	0	0
52	2513	0	6	47	0	2013/1/8	48	1	0
53	2514	0	6	64	0	2013/1/7	72	8	0
54	2515	0	6	37	0	2013/1/29	48	11	0
55	2516	0	6	47	0	2012/1/6	51	4	0
56	2517	0	6	38	0	2013/1/16	46	8	0
57	2518	0	6	33	0	2012/1/11	39	6	0
58	2519	0	6	49	1	2012/7/6	53	4	0

1									
2									
3	2520	0	6	58	0	2012/1/16	61	3	0
4	2521	1	6	75	0	2012/2/13	80	5	0
5	2522	0	6	42	0	2012/5/24	42	0	0
6	2523	0	6	41	1	2012/5/26	42	1	1
7	2524	0	6	51	0	2013/1/8	55	4	0
8	2525	0	6	68	0	2012/1/3	76	8	0
9									

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

For peer review only



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

CCI	CCI_group	Income	Urbanisatio	Etanercept	Adalimuma	Golimumab	Tocilizumal	Rituximab
1	1	1	4	1	0	0	0	0
0	0	0	2	1	0	0	0	0
5	1	1	3	4	0	0	0	0
3	1	1	3	4	0	0	0	0
1	1	1	1	2	0	0	0	0
3	1	1	2	4	0	0	0	0
1	1	1	3	2	0	0	0	0
1	1	1	2	3	0	0	0	0
2	1	1	3	3	0	0	0	0
2	1	1	2	3	0	0	0	0
0	0	0	2	3	0	0	0	0
3	1	1	2	4	0	0	0	0
1	1	1	4	2	0	0	0	0
1	1	1	4	2	0	0	0	0
1	1	1	4	3	0	0	0	0
1	1	1	1	3	0	0	0	0
3	1	1	4	2	0	0	0	0
1	1	1	4	2	0	0	0	0
4	1	1	4	1	0	0	0	0
1	1	1	2	2	0	0	0	0
1	1	1	4	2	0	0	0	0
1	1	1	4	2	0	0	0	0
1	1	1	4	3	0	0	0	0
0	0	0	1	4	0	0	0	0
1	1	1	2	4	0	0	0	0
0	0	0	3	1	0	0	0	0
1	1	1	4	4	0	0	0	0
3	1	1	4	4	0	0	0	0
1	1	1	2	1	0	0	0	0
0	0	0	4	2	0	0	0	0
0	0	0	1	3	0	0	0	0
1	1	1	4	1	0	0	0	0
1	1	1	3	2	0	0	0	0
1	1	1	3	3	0	0	0	0
0	0	0	4	3	0	0	0	0
1	1	1	4	1	0	0	0	0
1	1	1	3	4	0	0	0	0
1	1	1	4	1	0	0	0	0
1	1	1	2	1	0	0	0	0
2	1	1	3	3	0	0	0	0
1	1	1	3	3	0	0	0	0
2	1	1	3	4	0	0	0	0
1	1	1	1	4	0	0	0	0
0	0	0	2	2	0	0	0	0
3	1	1	2	4	0	0	0	0
1	1	1	4	3	0	0	0	0
1	1	1	4	1	0	0	0	0
0	0	0	4	1	0	0	0	0
2	1	1	3	2	0	0	0	0
4	1	1	1	3	0	0	0	0
2	1	1	1	2	0	0	0	0
3	1	1	3	4	0	0	0	0
1	1	1	4	3	0	0	0	0
2	1	1	1	4	0	0	0	0
1	1	1	1	3	0	0	0	0
3	1	1	1	1	0	0	0	0

1									
2									
3	1	1	3	4	0	0	0	0	0
4	2	1	1	4	0	0	0	0	0
5	4	1	4	1	0	0	0	0	0
6	1	1	2	2	0	0	0	0	0
7	1	1	1	2	0	0	0	0	0
8	1	1	3	4	0	0	0	0	0
9	1	1	3	3	0	0	0	0	0
10	1	1	4	2	0	0	0	0	0
11	1	1	4	2	0	0	0	0	0
12	2	1	1	4	0	0	0	0	0
13	1	1	1	1	0	0	0	0	0
14	1	1	3	2	0	0	0	0	0
15	1	1	3	4	0	0	0	0	0
16	1	1	2	3	0	0	0	0	0
17	2	1	2	3	0	0	0	0	0
18	3	1	3	2	0	0	0	0	0
19	3	1	3	4	0	0	0	0	0
20	1	1	3	1	0	0	0	0	0
21	2	1	3	2	0	0	0	0	0
22	2	1	3	2	0	0	0	0	0
23	2	1	1	3	0	0	0	0	0
24	1	1	4	1	0	0	0	0	0
25	1	1	4	1	0	0	0	0	0
26	2	1	4	2	0	0	0	0	0
27	2	1	3	4	0	0	0	0	0
28	1	1	4	1	0	0	0	0	0
29	1	1	3	2	0	0	0	0	0
30	0	0	4	2	0	0	0	0	0
31	0	0	4	2	0	0	0	0	0
32	1	1	1	2	0	0	0	0	0
33	1	1	1	2	0	0	0	0	0
34	1	1	3	2	0	0	0	0	0
35	1	1	4	1	0	0	0	0	0
36	2	1	4	2	0	0	0	0	0
37	2	1	1	3	0	0	0	0	0
38	6	1	2	2	0	0	0	0	0
39	0	0	1	3	0	0	0	0	0
40	1	1	4	2	0	0	0	0	0
41	2	1	4	3	0	0	0	0	0
42	0	0	2	1	0	0	0	0	0
43	1	1	4	2	0	0	0	0	0
44	1	1	2	1	0	0	0	0	0
45	2	1	4	2	0	0	0	0	0
46	3	1	3	1	0	0	0	0	0
47	1	1	1	3	0	0	0	0	0
48	1	1	2	4	0	0	0	0	0
49	1	1	2	1	0	0	0	0	0
50	1	1	2	2	0	0	0	0	0
51	1	1	3	3	0	0	0	0	0
52	2	1	1	1	0	0	0	0	0
53	1	1	2	2	0	0	0	0	0
54	2	1	1	3	0	0	0	0	0
55	2	1	1	2	0	0	0	0	0
56	1	1	1	1	0	0	0	0	0
57	0	0	2	3	0	0	0	0	0
58	1	1	4	2	0	0	0	0	0
59	2	1	3	4	0	0	0	0	0
60									

1									
2									
3	1	1	1	1	0	0	0	0	0
4	0	0	3	2	0	0	0	0	0
5	1	1	4	1	0	0	0	0	0
6	1	1	1	2	0	0	0	0	0
7	6	1	1	4	0	0	0	0	0
8	1	1	2	3	0	0	0	0	0
9	4	1	2	1	0	0	0	0	0
10	1	1	1	2	0	0	0	0	0
11	3	1	3	4	0	0	0	0	0
12	3	1	3	2	0	0	0	0	0
13	1	1	1	1	0	0	0	0	0
14	0	0	4	1	0	0	0	0	0
15	1	1	3	2	0	0	0	0	0
16	1	1	1	3	0	0	0	0	0
17	1	1	4	2	0	0	0	0	0
18	1	1	4	4	0	0	0	0	0
19	3	1	4	2	0	0	0	0	0
20	1	1	2	3	0	0	0	0	0
21	1	1	1	2	0	0	0	0	0
22	2	1	4	1	0	0	0	0	0
23	1	1	2	4	0	0	0	0	0
24	1	1	3	4	0	0	0	0	0
25	1	1	4	1	0	0	0	0	0
26	1	1	4	2	0	0	0	0	0
27	1	1	4	1	0	0	0	0	0
28	3	1	4	2	0	0	0	0	0
29	3	1	3	1	0	0	0	0	0
30	1	1	1	1	0	0	0	0	0
31	4	1	3	2	0	0	0	0	0
32	1	1	4	2	0	0	0	0	0
33	3	1	3	2	0	0	0	0	0
34	1	1	2	3	0	0	0	0	0
35	1	1	1	3	0	0	0	0	0
36	1	1	4	2	0	0	0	0	0
37	1	1	1	3	0	0	0	0	0
38	4	1	1	4	0	0	0	0	0
39	6	1	1	1	0	0	0	0	0
40	1	1	3	2	0	0	0	0	0
41	1	1	4	2	0	0	0	0	0
42	5	1	4	3	0	0	0	0	0
43	1	1	3	1	0	0	0	0	0
44	1	1	1	2	0	0	0	0	0
45	2	1	3	2	0	0	0	0	0
46	1	1	1	2	0	0	0	0	0
47	4	1	1	2	0	0	0	0	0
48	2	1	1	2	0	0	0	0	0
49	4	1	3	2	0	0	0	0	0
50	2	1	4	3	0	0	0	0	0
51	3	1	4	2	0	0	0	0	0
52	3	1	4	1	0	0	0	0	0
53	0	0	2	2	0	0	0	0	0
54	1	1	3	2	0	0	0	0	0
55	3	1	3	3	0	0	0	0	0
56	1	1	1	2	0	0	0	0	0
57	1	1	3	1	0	0	0	0	0
58	1	1	4	1	0	0	0	0	0
59	1	1	2	1	0	0	0	0	0
60	3	1	2	1	0	0	0	0	0

1									
2									
3	2	1	1	2	0	0	0	0	0
4	1	1	4	1	0	0	0	0	0
5	1	1	3	2	0	0	0	0	0
6	1	1	2	1	0	0	0	0	0
7	2	1	3	1	0	0	0	0	0
8	1	1	4	2	0	0	0	0	0
9	2	1	2	1	0	0	0	0	0
10	1	1	3	2	0	0	0	0	0
11	1	1	1	2	0	0	0	0	0
12	1	1	3	2	0	0	0	0	0
13	1	1	2	1	0	0	0	0	0
14	3	1	2	1	0	0	0	0	0
15	1	1	1	1	0	0	0	0	0
16	2	1	2	2	0	0	0	0	0
17	8	1	1	4	0	0	0	0	0
18	1	1	4	3	0	0	0	0	0
19	0	0	4	2	0	0	0	0	0
20	1	1	1	4	0	0	0	0	0
21	2	1	1	2	0	0	0	0	0
22	3	1	1	3	0	0	0	0	0
23	2	1	4	4	0	0	0	0	0
24	0	0	3	1	0	0	0	0	0
25	0	0	4	1	0	0	0	0	0
26	2	1	2	3	0	0	0	0	0
27	1	1	4	2	0	0	0	0	0
28	2	1	4	1	0	0	0	0	0
29	1	1	4	2	0	0	0	0	0
30	1	1	3	4	0	0	0	0	0
31	2	1	3	2	0	0	0	0	0
32	1	1	4	1	0	0	0	0	0
33	1	1	1	2	0	0	0	0	0
34	3	1	4	2	0	0	0	0	0
35	2	1	4	1	0	0	0	0	0
36	1	1	3	3	0	0	0	0	0
37	1	1	2	2	0	0	0	0	0
38	0	0	4	2	0	0	0	0	0
39	1	1	4	1	0	0	0	0	0
40	1	1	4	1	0	0	0	0	0
41	0	0	2	4	0	0	0	0	0
42	3	1	3	3	0	0	0	0	0
43	1	1	3	3	0	0	0	0	0
44	1	1	2	2	0	0	0	0	0
45	1	1	1	1	0	0	0	0	0
46	1	1	1	3	0	0	0	0	0
47	1	1	4	2	0	0	0	0	0
48	1	1	2	2	0	0	0	0	0
49	1	1	2	1	0	0	0	0	0
50	3	1	2	1	0	0	0	0	0
51	1	1	4	2	0	0	0	0	0
52	1	1	1	4	0	0	0	0	0
53	1	1	3	4	0	0	0	0	0
54	1	1	4	3	0	0	0	0	0
55	1	1	3	3	0	0	0	0	0
56	1	1	1	2	0	0	0	0	0
57	1	1	3	2	0	0	0	0	0
58	2	1	2	3	0	0	0	0	0
59	1	1	1	4	0	0	0	0	0
60									

1									
2									
3	2	1	3	1	0	0	0	0	0
4	1	1	4	4	0	0	0	0	0
5	1	1	4	1	0	0	0	0	0
6	1	1	1	2	0	0	0	0	0
7	3	1	4	3	0	0	0	0	0
8	3	1	3	1	0	0	0	0	0
9	1	1	1	2	0	0	0	0	0
10	1	1	4	1	0	0	0	0	0
11	0	0	2	2	0	0	0	0	0
12	3	1	3	2	0	0	0	0	0
13	4	1	2	3	0	0	0	0	0
14	0	0	3	2	0	0	0	0	0
15	1	1	3	4	0	0	0	0	0
16	1	1	4	2	0	0	0	0	0
17	4	1	3	2	0	0	0	0	0
18	1	1	3	1	0	0	0	0	0
19	1	1	3	3	0	0	0	0	0
20	1	1	3	1	0	0	0	0	0
21	1	1	3	2	0	0	0	0	0
22	3	1	4	2	0	0	0	0	0
23	1	1	3	4	0	0	0	0	0
24	1	1	3	2	0	0	0	0	0
25	3	1	4	3	0	0	0	0	0
26	3	1	2	2	0	0	0	0	0
27	5	1	1	2	0	0	0	0	0
28	1	1	3	4	0	0	0	0	0
29	1	1	4	2	0	0	0	0	0
30	1	1	3	1	0	0	0	0	0
31	1	1	4	3	0	0	0	0	0
32	1	1	1	1	0	0	0	0	0
33	2	1	3	1	0	0	0	0	0
34	4	1	1	2	0	0	0	0	0
35	1	1	1	4	0	0	0	0	0
36	1	1	4	4	0	0	0	0	0
37	1	1	2	4	0	0	0	0	0
38	1	1	3	4	0	0	0	0	0
39	0	0	3	2	0	0	0	0	0
40	1	1	2	3	0	0	0	0	0
41	3	1	4	2	0	0	0	0	0
42	3	1	4	3	0	0	0	0	0
43	1	1	3	2	0	0	0	0	0
44	1	1	2	2	0	0	0	0	0
45	2	1	2	4	0	0	0	0	0
46	2	1	4	3	0	0	0	0	0
47	0	0	3	4	0	0	0	0	0
48	2	1	4	1	0	0	0	0	0
49	1	1	2	1	0	0	0	0	0
50	2	1	3	1	0	0	0	0	0
51	1	1	3	4	0	0	0	0	0
52	2	1	3	3	0	0	0	0	0
53	3	1	4	2	0	0	0	0	0
54	1	1	4	1	0	0	0	0	0
55	1	1	1	1	0	0	0	0	0
56	1	1	3	4	0	0	0	0	0
57	1	1	4	3	0	0	0	0	0
58	1	1	3	3	0	0	0	0	0
59	5	1	3	3	0	0	0	0	0
60	1	1	2	2	0	0	0	0	0

1									
2									
3	1	1	4	1	0	0	0	0	0
4	2	1	3	4	0	0	0	0	0
5	3	1	3	4	0	0	0	0	0
6	2	1	3	4	0	0	0	0	0
7	6	1	1	3	0	0	0	0	0
8	8	1	2	4	0	0	0	0	0
9	2	1	1	2	0	0	0	0	0
10	1	1	2	2	0	0	0	0	0
11	1	1	1	2	0	0	0	0	0
12	2	1	4	3	0	0	0	0	0
13	1	1	4	2	0	0	0	0	0
14	1	1	2	3	0	0	0	0	0
15	1	1	1	3	0	0	0	0	0
16	4	1	1	4	0	0	0	0	0
17	1	1	1	1	0	0	0	0	0
18	0	0	4	1	0	0	0	0	0
19	0	0	3	1	0	0	0	0	0
20	3	1	4	1	0	0	0	0	0
21	1	1	4	1	0	0	0	0	0
22	1	1	3	1	0	0	0	0	0
23	1	1	1	4	0	0	0	0	0
24	1	1	1	2	0	0	0	0	0
25	8	1	1	2	0	0	0	0	0
26	1	1	3	4	0	0	0	0	0
27	4	1	1	2	0	0	0	0	0
28	3	1	1	1	0	0	0	0	0
29	1	1	3	2	0	0	0	0	0
30	1	1	1	1	0	0	0	0	0
31	1	1	2	3	0	0	0	0	0
32	1	1	3	4	0	0	0	0	0
33	5	1	3	4	0	0	0	0	0
34	1	1	3	4	0	0	0	0	0
35	2	1	4	1	0	0	0	0	0
36	3	1	3	1	0	0	0	0	0
37	1	1	3	1	0	0	0	0	0
38	0	0	4	4	0	0	0	0	0
39	1	1	3	2	0	0	0	0	0
40	1	1	4	2	0	0	0	0	0
41	2	1	3	3	0	0	0	0	0
42	1	1	2	1	0	0	0	0	0
43	3	1	4	1	0	0	0	0	0
44	1	1	3	1	0	0	0	0	0
45	3	1	2	1	0	0	0	0	0
46	1	1	2	4	0	0	0	0	0
47	1	1	3	1	0	0	0	0	0
48	1	1	4	2	0	0	0	0	0
49	1	1	1	3	0	0	0	0	0
50	3	1	4	4	0	0	0	0	0
51	1	1	1	1	0	0	0	0	0
52	1	1	1	3	0	0	0	0	0
53	2	1	3	1	0	0	0	0	0
54	1	1	4	3	0	0	0	0	0
55	1	1	4	1	0	0	0	0	0
56	1	1	4	2	0	0	0	0	0
57	2	1	3	2	0	0	0	0	0
58	1	1	1	4	0	0	0	0	0
59	2	1	4	1	0	0	0	0	0

1									
2									
3	1	1	4	2	0	0	0	0	0
4	1	1	2	4	0	0	0	0	0
5	3	1	4	1	0	0	0	0	0
6	1	1	4	2	0	0	0	0	0
7	1	1	4	1	0	0	0	0	0
8	1	1	3	3	0	0	0	0	0
9	1	1	4	1	0	1	0	0	0
10	1	1	2	2	0	0	0	0	0
11	1	1	4	1	0	0	0	0	0
12	1	1	3	1	0	0	0	0	0
13	1	1	3	2	0	0	0	0	0
14	2	1	2	2	0	0	0	0	0
15	1	1	3	2	0	0	0	0	0
16	1	1	1	2	0	0	0	0	0
17	1	1	4	2	0	0	0	0	0
18	4	1	2	3	0	0	0	0	0
19	1	1	1	2	0	0	0	0	0
20	2	1	3	1	0	0	0	0	0
21	1	1	4	3	0	0	0	0	0
22	1	1	1	1	0	0	0	0	0
23	1	1	2	2	0	0	0	0	0
24	1	1	2	2	0	0	0	0	0
25	4	1	1	4	0	0	0	0	0
26	1	1	4	2	0	0	0	0	0
27	1	1	1	2	0	0	0	0	0
28	1	1	3	1	0	0	0	0	0
29	1	1	3	2	0	0	0	0	0
30	1	1	2	3	0	0	0	0	0
31	4	1	2	1	0	0	0	0	0
32	3	1	2	1	0	0	0	0	0
33	0	0	2	2	0	0	0	0	0
34	1	1	3	2	0	0	0	0	0
35	0	0	4	1	0	0	0	0	0
36	1	1	1	1	0	0	0	0	0
37	1	1	4	2	0	0	0	0	0
38	3	1	1	3	0	0	0	0	0
39	4	1	3	4	0	0	0	0	0
40	1	1	3	2	0	0	0	0	0
41	1	1	2	2	0	0	0	0	0
42	4	1	1	1	0	0	0	0	0
43	1	1	1	1	0	0	0	0	0
44	2	1	1	4	0	0	0	0	0
45	1	1	4	3	0	0	0	0	0
46	1	1	2	1	0	0	0	0	0
47	1	1	1	2	0	0	0	0	0
48	1	1	1	2	0	0	0	0	0
49	1	1	4	4	0	0	0	0	0
50	1	1	1	2	0	0	0	0	0
51	1	1	3	1	0	0	0	0	0
52	1	1	4	1	0	0	0	0	0
53	2	1	1	3	0	0	0	0	0
54	1	1	1	2	0	0	0	0	0
55	4	1	3	4	0	0	0	0	0
56	1	1	3	4	0	0	0	0	0
57	1	1	1	2	0	0	0	0	0
58	1	1	4	2	0	0	0	0	0
59	1	1	3	1	0	0	0	0	0
60	1	1	3	1	0	0	0	0	0

1									
2									
3	1	1	4	2	0	0	0	0	0
4	1	1	4	1	0	0	0	0	0
5	1	1	3	4	0	0	0	0	0
6	0	0	2	1	0	0	0	0	0
7	2	1	4	4	0	0	0	0	0
8	3	1	1	4	0	0	0	0	0
9	1	1	1	2	0	0	0	0	0
10	1	1	4	2	0	0	0	0	0
11	3	1	3	4	0	0	0	0	0
12	2	1	1	3	0	0	0	0	0
13	1	1	1	4	0	0	0	0	0
14	1	1	2	1	0	0	0	0	0
15	0	0	2	1	0	0	0	0	0
16	4	1	3	2	0	0	0	0	0
17	1	1	4	1	0	0	0	0	0
18	2	1	4	1	0	0	0	0	0
19	0	0	4	1	0	0	0	0	0
20	1	1	1	1	0	0	0	0	0
21	3	1	1	2	0	0	0	0	0
22	2	1	3	4	0	1	0	0	0
23	2	1	1	3	0	0	0	0	0
24	2	1	3	4	1	0	0	0	0
25	2	1	3	4	0	0	0	0	0
26	2	1	3	4	0	0	0	0	0
27	2	1	1	2	0	0	0	0	0
28	2	1	4	3	0	0	0	0	0
29	0	0	4	4	0	0	0	0	0
30	9	1	2	1	0	0	0	0	0
31	1	1	1	2	0	0	0	0	0
32	8	1	4	1	0	0	0	0	0
33	1	1	1	2	0	0	0	0	0
34	1	1	1	3	0	0	0	0	0
35	1	1	4	1	0	0	0	0	0
36	1	1	2	1	0	0	0	0	0
37	3	1	1	2	0	0	0	0	0
38	1	1	1	4	0	0	0	0	0
39	1	1	1	4	0	1	0	0	0
40	2	1	2	4	0	0	0	0	0
41	1	1	3	4	0	0	0	0	0
42	1	1	1	4	0	0	0	0	0
43	1	1	3	4	0	0	0	0	0
44	0	0	3	3	0	0	0	0	0
45	5	1	2	1	1	0	0	0	0
46	4	1	1	1	0	0	0	0	0
47	2	1	2	2	1	0	0	0	0
48	1	1	4	4	0	0	0	0	0
49	1	1	2	4	0	1	0	0	0
50	7	1	3	3	0	0	0	0	0
51	1	1	4	4	0	0	0	0	0
52	1	1	1	2	0	0	0	0	0
53	1	1	1	3	0	0	0	0	0
54	8	1	1	4	0	0	0	0	0
55	1	1	3	4	0	1	0	0	0
56	3	1	1	2	0	0	0	0	0
57	2	1	1	3	0	0	0	0	0
58	2	1	3	4	0	0	0	0	0
59	0	0	3	3	0	0	0	0	0
60									



1									
2									
3	1	1	1	1	0	0	0	0	0
4	3	1	2	1	0	0	0	0	0
5	1	1	4	3	1	0	0	0	0
6	0	0	1	2	0	0	0	0	0
7	1	1	3	2	0	0	0	0	0
8	3	1	1	1	0	1	0	0	0
9	0	0	2	3	0	0	0	0	0
10	3	1	1	3	0	0	0	0	0
11	2	1	4	1	1	0	0	0	0
12	4	1	4	4	1	1	0	0	0
13	2	1	1	4	0	0	0	0	0
14	2	1	3	4	0	0	0	0	0
15	1	1	3	3	0	0	0	0	0
16	0	0	4	1	0	0	0	0	0
17	3	1	2	1	0	0	0	0	0
18	3	1	1	1	0	1	0	0	0
19	0	0	4	3	0	0	0	0	0
20	2	1	3	4	0	0	0	0	0
21	2	1	1	2	0	0	0	0	0
22	1	1	3	4	0	0	0	0	0
23	3	1	3	2	0	0	0	0	0
24	2	1	4	3	0	0	0	0	0
25	1	1	3	4	0	0	0	0	0
26	5	1	2	2	0	0	0	0	0
27	1	1	4	3	1	0	0	0	0
28	2	1	4	1	0	0	0	0	0
29	2	1	4	2	0	0	0	0	1
30	1	1	4	2	0	0	0	0	0
31	1	1	3	4	0	0	0	0	0
32	7	1	1	3	0	0	0	0	0
33	2	1	4	3	0	0	0	0	0
34	3	1	3	4	0	0	0	0	0
35	3	1	3	2	0	0	0	0	0
36	2	1	4	4	0	0	0	0	0
37	6	1	1	2	1	0	0	0	0
38	4	1	4	1	0	0	0	0	0
39	1	1	3	4	0	0	0	0	0
40	3	1	1	3	0	0	0	0	0
41	1	1	3	2	0	0	0	0	0
42	4	1	3	4	0	0	0	0	0
43	1	1	1	1	0	0	0	0	0
44	3	1	1	2	0	0	0	0	0
45	1	1	1	2	0	0	0	0	0
46	2	1	2	4	0	0	0	0	0
47	1	1	3	4	0	0	0	0	0
48	0	0	1	2	0	0	0	0	0
49	1	1	2	1	0	0	0	0	1
50	2	1	3	4	0	0	0	0	0
51	1	1	3	4	0	0	0	0	0
52	2	1	2	4	0	0	0	0	0
53	3	1	2	2	0	0	1	0	0
54	1	1	3	4	0	0	0	0	0
55	1	1	2	3	0	0	0	0	0
56	1	1	4	1	0	0	0	0	0
57	0	0	3	4	0	0	0	0	0
58	0	0	3	4	0	0	0	0	0
59	0	0	3	4	0	0	0	0	0
60	0	0	3	4	0	0	0	0	0

1									
2									
3	0	0	1	1	0	0	0	0	0
4	1	1	4	1	1	0	0	0	0
5	2	1	3	4	0	0	0	0	0
6	4	1	1	2	0	0	0	0	0
7	1	1	1	1	0	0	0	0	0
8	2	1	3	4	0	0	0	0	0
9	2	1	2	2	0	0	0	0	0
10	3	1	1	1	0	0	0	0	0
11	0	0	1	4	0	0	0	0	0
12	1	1	1	1	0	0	0	0	0
13	3	1	1	3	0	0	0	0	0
14	1	1	2	4	0	0	0	0	0
15	1	1	1	1	0	0	0	0	0
16	2	1	1	3	0	0	0	0	0
17	2	1	3	4	0	0	0	0	0
18	0	0	1	4	0	0	0	0	0
19	1	1	4	4	0	0	0	0	0
20	2	1	1	2	0	1	0	0	0
21	0	0	1	4	0	0	0	0	0
22	1	1	1	4	0	0	0	0	0
23	1	1	2	2	0	0	0	0	0
24	1	1	3	2	0	0	0	0	0
25	1	1	2	1	0	0	0	0	0
26	1	1	3	4	0	0	0	0	0
27	4	1	1	4	0	0	0	0	0
28	1	1	2	1	0	0	0	0	0
29	0	0	4	3	0	0	0	0	0
30	1	1	2	3	0	0	0	0	0
31	2	1	2	2	0	0	0	0	0
32	2	1	4	4	0	0	0	0	1
33	1	1	3	4	0	0	0	0	0
34	3	1	4	2	1	0	0	0	0
35	2	1	4	2	0	0	0	0	0
36	1	1	4	1	0	0	0	0	0
37	2	1	1	2	0	0	0	0	0
38	2	1	3	3	0	0	0	0	0
39	2	1	1	3	0	0	0	0	0
40	8	1	3	4	0	0	0	0	0
41	1	1	3	3	0	0	0	0	0
42	0	0	2	4	0	0	0	0	0
43	2	1	4	1	0	0	0	0	0
44	0	0	1	3	0	0	0	0	0
45	3	1	2	2	0	0	0	0	0
46	1	1	4	3	0	0	0	0	0
47	1	1	1	2	0	0	0	0	0
48	4	1	3	1	0	1	0	0	0
49	2	1	4	2	1	0	0	0	0
50	1	1	1	4	0	0	0	0	0
51	3	1	3	2	0	0	0	0	0
52	1	1	4	4	0	0	0	0	0
53	2	1	1	1	0	0	0	0	0
54	3	1	4	3	0	0	0	0	0
55	2	1	1	2	0	0	0	0	0
56	1	1	1	3	0	0	0	0	0
57	2	1	1	2	0	0	0	0	0
58	2	1	2	4	0	0	0	0	0
59	2	1	4	4	0	0	0	0	0
60	1	1	4	4	0	0	0	0	1

1									
2									
3	1	1	3	4	0	0	0	0	0
4	5	1	3	4	0	0	0	0	0
5	1	1	1	4	0	0	0	0	0
6	2	1	3	3	0	0	0	0	0
7	1	1	2	2	0	0	0	0	0
8	5	1	2	2	0	0	0	0	0
9	2	1	1	2	0	0	0	0	0
10	1	1	2	3	0	1	0	0	0
11	1	1	4	3	0	0	0	0	0
12	1	1	1	4	0	0	0	0	0
13	0	0	4	2	0	0	0	0	0
14	1	1	4	1	1	0	0	0	0
15	0	0	1	1	0	0	0	0	0
16	1	1	1	4	0	0	0	0	0
17	1	1	4	2	0	0	0	0	0
18	0	0	2	2	0	0	0	0	0
19	3	1	4	4	0	0	0	0	0
20	5	1	2	3	0	0	0	0	0
21	1	1	4	2	0	0	0	0	0
22	1	1	3	2	0	0	0	0	0
23	1	1	1	2	0	0	0	0	0
24	1	1	1	1	0	0	0	0	0
25	1	1	1	1	0	0	0	0	0
26	0	0	4	1	0	0	0	0	0
27	1	1	1	1	0	0	0	0	0
28	3	1	4	2	0	0	0	0	0
29	3	1	1	1	0	0	0	0	0
30	1	1	1	3	0	0	0	0	0
31	0	0	2	1	0	0	0	0	0
32	1	1	4	3	0	0	0	0	0
33	1	1	3	2	0	0	0	0	0
34	2	1	4	1	1	0	0	0	0
35	2	1	2	1	0	0	0	0	0
36	1	1	2	1	0	0	0	0	0
37	1	1	3	4	0	0	0	0	0
38	5	1	4	1	0	0	0	0	0
39	2	1	1	1	0	0	0	0	0
40	1	1	3	2	0	0	0	0	0
41	3	1	4	2	0	0	0	0	0
42	0	0	4	1	0	0	0	0	0
43	1	1	4	3	0	0	0	0	0
44	5	1	3	2	0	0	0	0	0
45	1	1	3	2	1	0	0	0	0
46	1	1	1	4	0	0	0	0	0
47	0	0	4	3	0	0	0	0	0
48	1	1	2	1	0	0	0	0	0
49	2	1	2	3	1	0	0	0	0
50	9	1	1	3	0	0	0	0	0
51	1	1	3	3	0	0	0	0	0
52	2	1	1	2	1	0	0	0	0
53	4	1	1	4	0	0	0	0	0
54	0	0	1	1	0	0	0	0	0
55	3	1	2	3	0	0	0	0	0
56	1	1	4	2	0	0	0	0	0
57	2	1	1	3	0	0	0	0	0
58	2	1	1	1	0	0	0	0	0
59	2	1	1	1	0	0	0	0	0
60	1	1	4	1	0	0	0	0	0

1									
2									
3	1	1	1	2	0	1	0	0	0
4	2	1	3	4	0	0	0	0	0
5	1	1	4	1	0	0	0	0	0
6	1	1	2	1	0	0	0	0	0
7	7	1	4	2	0	0	0	0	0
8	2	1	4	2	0	0	0	0	0
9	2	1	1	1	0	0	0	0	0
10	1	1	2	1	1	0	0	0	0
11	2	1	3	4	0	0	0	0	0
12	3	1	3	4	0	0	0	0	0
13	2	1	1	3	0	0	0	0	0
14	1	1	2	1	0	0	0	0	0
15	2	1	1	1	1	0	0	0	0
16	1	1	4	3	0	0	0	0	0
17	1	1	4	1	0	0	0	0	0
18	1	1	4	1	0	0	0	0	0
19	3	1	3	1	0	0	0	0	1
20	1	1	2	1	0	0	0	0	0
21	2	1	1	4	0	0	0	0	0
22	3	1	3	3	0	0	0	0	0
23	1	1	4	1	1	0	0	0	0
24	3	1	1	1	0	0	0	0	0
25	1	1	4	1	0	0	0	0	0
26	1	1	4	1	0	0	0	0	0
27	1	1	4	1	0	1	0	0	0
28	0	0	1	2	0	0	0	0	0
29	4	1	2	2	0	1	0	0	0
30	2	1	1	1	0	0	0	0	0
31	1	1	1	1	0	0	0	0	0
32	3	1	2	3	0	0	0	0	0
33	2	1	2	1	0	0	0	0	0
34	1	1	3	4	0	1	0	0	0
35	1	1	3	4	0	0	0	0	0
36	1	1	4	2	0	0	0	0	0
37	1	1	4	4	0	0	0	0	0
38	2	1	2	2	0	0	0	0	0
39	1	1	4	2	0	0	0	0	0
40	1	1	4	2	0	0	0	0	0
41	1	1	4	3	0	0	0	0	0
42	1	1	1	1	0	0	0	0	0
43	1	1	2	3	0	0	0	0	0
44	1	1	1	3	0	0	0	0	0
45	2	1	3	3	0	0	0	0	0
46	2	1	1	1	0	0	0	0	0
47	1	1	2	1	0	0	0	0	0
48	1	1	1	4	0	0	0	0	0
49	1	1	3	2	0	0	0	0	0
50	0	0	3	1	0	0	0	0	0
51	4	1	1	1	0	0	0	0	0
52	4	1	1	2	0	0	0	0	0
53	4	1	3	4	0	0	0	0	0
54	2	1	3	1	0	0	0	0	0
55	2	1	3	2	1	0	0	0	0
56	1	1	4	4	0	0	0	0	0
57	1	1	1	3	0	0	0	0	0
58	2	1	3	4	1	0	0	0	0
59	1	1	4	2	0	1	0	0	0
60									

1									
2									
3	1	1	4	2	0	0	0	0	0
4	2	1	1	3	0	0	0	0	0
5	1	1	3	4	0	0	0	0	0
6	1	1	1	2	0	0	0	0	0
7	0	0	2	1	0	0	0	0	0
8	1	1	1	3	0	0	0	0	0
9	0	0	1	1	0	0	0	0	0
10	4	1	3	4	0	0	0	0	0
11	0	0	1	4	0	0	0	0	0
12	2	1	1	2	0	0	0	0	0
13	1	1	2	1	0	0	0	0	0
14	1	1	1	2	1	0	0	0	0
15	1	1	4	2	0	0	0	0	0
16	0	0	4	1	0	0	0	0	0
17	2	1	2	4	0	0	0	0	0
18	1	1	1	1	0	0	0	0	1
19	1	1	3	2	0	0	0	0	0
20	1	1	1	3	0	0	0	0	0
21	2	1	1	2	0	0	0	0	0
22	1	1	3	4	0	0	0	0	0
23	1	1	2	1	0	0	0	0	0
24	4	1	3	4	0	0	0	0	0
25	0	0	1	2	0	0	0	0	0
26	1	1	3	3	0	0	0	0	0
27	2	1	3	4	0	0	0	0	1
28	2	1	1	3	0	0	0	0	0
29	2	1	4	1	0	0	0	0	0
30	1	1	3	3	1	0	0	0	0
31	4	1	1	4	0	0	0	0	0
32	1	1	2	2	0	0	0	0	0
33	1	1	1	2	0	0	0	0	0
34	1	1	4	1	0	0	0	0	0
35	1	1	1	1	0	0	0	0	0
36	3	1	1	1	0	0	0	0	0
37	2	1	4	4	0	0	0	0	0
38	3	1	1	1	0	0	0	0	0
39	0	0	1	2	0	0	0	0	0
40	1	1	2	1	0	0	0	0	0
41	1	1	3	2	1	0	0	0	0
42	0	0	1	4	0	0	0	0	0
43	4	1	2	4	0	0	0	0	1
44	1	1	3	2	0	0	0	0	0
45	1	1	1	3	0	0	0	0	0
46	1	1	4	1	0	0	0	0	0
47	6	1	1	4	0	0	0	0	0
48	3	1	1	1	0	0	0	0	1
49	5	1	2	4	0	0	0	0	0
50	2	1	4	4	0	0	0	0	0
51	0	0	1	4	0	0	0	0	0
52	2	1	1	4	0	0	0	0	0
53	4	1	2	4	0	0	0	0	1
54	4	1	3	4	0	0	0	0	0
55	1	1	2	1	0	0	0	0	0
56	2	1	3	2	0	0	0	0	0
57	1	1	1	3	0	0	0	0	0
58	2	1	3	2	0	0	0	0	0
59	1	1	1	3	0	0	0	0	0
60	1	1	3	2	0	0	0	0	0

1									
2									
3	5	1	2	2	0	0	0	0	0
4	4	1	1	1	0	0	0	0	0
5	1	1	3	1	0	0	0	0	0
6	1	1	1	1	0	1	0	0	0
7	2	1	2	1	0	0	0	0	0
8	2	1	2	1	0	0	0	0	0
9	0	0	2	3	0	0	0	0	0
10	1	1	4	1	0	0	0	0	0
11	0	0	1	3	0	0	0	0	0
12	2	1	3	1	0	0	0	0	0
13	3	1	1	4	0	0	0	0	0
14	4	1	4	2	0	0	0	0	0
15	1	1	3	1	0	0	0	0	0
16	1	1	3	2	0	0	0	0	0
17	3	1	1	1	0	1	0	0	0
18	1	1	1	2	0	0	0	0	0
19	0	0	3	4	0	0	0	0	0
20	0	0	3	4	0	0	0	0	0
21	1	1	4	2	0	0	0	0	0
22	3	1	3	4	0	1	0	1	0
23	3	1	2	2	1	0	0	0	0
24	2	1	1	1	0	0	0	0	0
25	2	1	2	1	1	0	0	0	0
26	3	1	2	2	0	0	0	0	0
27	1	1	3	4	0	0	0	0	0
28	1	1	2	3	0	0	0	0	0
29	1	1	3	3	0	0	0	0	0
30	2	1	1	1	1	0	0	0	0
31	2	1	1	1	1	0	0	0	0
32	1	1	4	1	0	0	0	0	0
33	0	0	1	2	0	0	0	0	0
34	2	1	4	2	0	0	0	0	0
35	1	1	1	1	0	1	0	0	0
36	1	1	4	1	0	0	0	0	0
37	3	1	4	1	0	0	0	0	0
38	8	1	3	4	0	0	0	0	0
39	6	1	3	4	0	0	0	0	0
40	4	1	3	4	0	0	0	0	0
41	2	1	2	1	0	0	0	0	0
42	1	1	1	2	0	0	0	0	0
43	0	0	3	1	0	0	0	0	0
44	3	1	1	1	0	0	0	0	0
45	1	1	3	4	0	0	0	0	0
46	2	1	2	2	0	1	0	0	0
47	1	1	3	1	0	0	0	0	0
48	1	1	3	4	0	0	0	0	0
49	1	1	1	1	0	0	0	0	0
50	2	1	4	2	0	0	0	0	0
51	1	1	2	2	0	0	0	0	0
52	0	0	1	1	0	0	0	0	0
53	3	1	2	1	0	0	0	0	0
54	1	1	4	2	1	0	0	0	0
55	1	1	1	1	0	0	0	0	0
56	1	1	2	2	0	0	0	0	0
57	1	1	2	1	0	0	0	0	0
58	2	1	4	1	0	0	0	0	0
59	1	1	4	1	0	1	0	0	0
60									

1									
2									
3	1	1	4	2	0	0	0	0	0
4	1	1	3	1	0	0	0	0	0
5	1	1	4	1	0	0	0	1	0
6	2	1	1	4	0	0	0	0	0
7	1	1	1	2	0	0	0	0	0
8	1	1	3	3	0	0	0	0	0
9	1	1	1	1	0	1	0	0	0
10	1	1	1	2	0	0	0	0	0
11	1	1	3	4	0	0	0	0	0
12	3	1	2	1	0	0	0	0	0
13	1	1	1	1	0	0	0	0	0
14	0	0	3	3	0	0	0	0	0
15	1	1	4	3	0	0	0	0	0
16	2	1	1	3	0	0	0	0	0
17	3	1	1	1	0	0	0	0	0
18	2	1	2	2	0	0	0	0	0
19	1	1	1	1	0	0	0	0	0
20	8	1	4	1	0	0	0	0	0
21	1	1	1	3	0	0	0	0	0
22	1	1	1	1	0	0	0	0	0
23	1	1	1	4	0	0	0	0	0
24	1	1	1	1	0	0	0	0	0
25	1	1	3	3	0	1	0	0	0
26	2	1	1	2	0	0	0	0	0
27	1	1	1	3	0	0	0	0	0
28	2	1	1	2	0	0	0	0	0
29	1	1	2	2	0	0	0	0	0
30	5	1	1	4	0	0	0	0	0
31	3	1	3	4	0	0	0	0	0
32	1	1	3	4	1	0	0	0	0
33	5	1	3	4	0	0	0	0	0
34	2	1	4	2	0	0	0	0	0
35	2	1	1	2	0	0	0	0	0
36	3	1	1	2	0	0	0	0	0
37	3	1	1	1	0	0	0	0	1
38	1	1	2	1	1	0	0	0	0
39	2	1	2	1	0	1	0	0	0
40	2	1	2	4	0	0	0	0	0
41	1	1	1	1	0	0	0	0	0
42	1	1	2	1	0	1	0	0	0
43	2	1	1	1	0	0	0	0	0
44	2	1	3	4	0	0	0	0	0
45	1	1	4	4	0	0	0	0	0
46	1	1	1	1	0	0	0	0	0
47	0	0	3	4	0	0	0	0	0
48	2	1	1	4	0	0	0	0	0
49	3	1	1	4	0	1	0	0	0
50	4	1	4	1	0	0	0	0	0
51	1	1	1	2	0	0	0	0	0
52	2	1	3	4	0	0	0	0	0
53	3	1	1	1	0	0	0	0	0
54	5	1	3	2	0	0	0	0	0
55	1	1	1	3	0	0	0	0	0
56	2	1	1	4	1	0	0	0	0
57	1	1	4	3	0	0	0	0	0
58	2	1	4	2	0	0	0	0	0
59	0	0	1	2	0	0	0	0	0
60									

1									
2									
3	2	1	4	1	0	0	0	0	0
4	0	0	3	4	0	0	0	0	0
5	2	1	3	4	0	0	0	0	1
6	1	1	4	4	0	0	0	0	0
7	1	1	2	2	0	0	0	0	0
8	2	1	4	4	0	0	0	0	0
9	1	1	3	1	0	0	0	0	0
10	3	1	2	3	0	0	0	0	0
11	0	0	2	4	0	0	0	0	0
12	2	1	2	4	0	0	0	0	0
13	1	1	1	1	0	0	0	0	0
14	4	1	4	2	0	0	0	0	0
15	2	1	2	4	0	0	0	0	0
16	2	1	3	4	0	0	0	0	0
17	2	1	1	4	0	0	0	0	0
18	2	1	1	1	0	0	0	0	0
19	0	0	2	2	0	0	0	0	0
20	0	0	1	1	0	0	0	0	0
21	2	1	1	4	0	0	0	0	0
22	0	0	3	3	0	0	0	0	0
23	3	1	1	1	0	0	0	0	0
24	1	1	4	2	0	0	0	0	0
25	2	1	3	2	0	0	0	0	0
26	0	0	3	4	0	0	0	0	0
27	1	1	1	1	0	0	0	0	0
28	2	1	3	4	0	0	0	0	0
29	5	1	2	4	0	0	0	0	0
30	1	1	1	2	0	1	0	0	0
31	0	0	2	3	0	0	0	0	0
32	9	1	1	2	0	0	0	0	0
33	2	1	1	2	0	0	0	0	0
34	3	1	1	2	0	0	0	0	0
35	1	1	1	1	0	0	0	0	0
36	5	1	1	2	0	0	0	0	0
37	2	1	2	2	0	0	0	0	0
38	1	1	4	1	0	0	0	0	0
39	2	1	2	3	0	0	0	0	0
40	4	1	3	4	0	0	0	0	0
41	3	1	3	4	0	0	0	0	0
42	1	1	1	1	0	0	0	0	0
43	1	1	3	4	0	0	0	0	0
44	1	1	2	2	0	0	0	0	0
45	2	1	1	2	0	0	0	0	0
46	1	1	3	2	0	0	0	0	0
47	2	1	1	3	0	1	0	0	0
48	1	1	4	2	0	0	0	0	0
49	1	1	1	3	0	0	0	0	0
50	4	1	3	4	0	0	0	0	0
51	0	0	1	3	0	0	0	0	0
52	0	0	1	1	0	0	0	0	0
53	0	0	1	3	0	0	0	0	0
54	3	1	4	2	0	0	0	0	1
55	1	1	3	3	0	0	0	0	0
56	3	1	1	4	0	0	0	0	0
57	1	1	3	4	1	0	0	0	0
58	0	0	4	1	0	0	0	0	0
59	0	0							
60									



1									
2									
3	0	0	4	2	0	0	0	0	0
4	1	1	3	4	1	0	0	0	0
5	1	1	2	2	0	0	0	0	0
6	2	1	1	4	0	0	0	0	0
7	1	1	1	3	1	0	0	0	0
8	4	1	1	2	0	0	0	0	0
9	1	1	3	4	0	0	0	0	0
10	2	1	4	2	0	0	0	0	0
11	1	1	3	1	0	0	0	0	0
12	1	1	3	4	0	0	0	0	0
13	2	1	2	1	0	0	0	0	0
14	5	1	4	1	0	0	0	0	0
15	1	1	3	4	0	0	0	0	0
16	3	1	2	3	0	0	0	0	0
17	2	1	1	2	0	0	0	0	0
18	2	1	2	1	0	0	0	0	1
19	1	1	3	1	0	0	0	0	0
20	0	0	1	4	0	0	0	0	0
21	0	0	2	1	0	0	0	0	0
22	1	1	1	3	0	0	0	0	0
23	0	0	1	2	0	0	0	0	0
24	1	1	1	1	0	0	0	0	0
25	2	1	2	1	0	0	0	0	0
26	0	0	2	2	0	0	0	0	0
27	4	1	4	1	1	0	0	0	0
28	1	1	2	1	0	0	0	0	0
29	3	1	3	4	0	0	0	0	0
30	2	1	3	4	1	0	0	0	1
31	1	1	2	3	0	0	0	0	0
32	1	1	2	3	0	0	0	0	0
33	2	1	1	2	0	0	0	0	0
34	2	1	1	4	1	0	0	0	0
35	1	1	3	1	0	0	0	0	0
36	0	0	3	4	0	0	0	0	0
37	2	1	4	2	0	0	0	0	0
38	1	1	1	2	0	0	0	0	0
39	3	1	3	4	1	0	0	1	1
40	1	1	3	2	0	1	0	0	0
41	1	1	3	4	0	0	0	0	0
42	1	1	2	4	0	0	0	0	0
43	1	1	4	4	0	0	0	0	0
44	3	1	4	1	0	0	0	0	0
45	1	1	4	1	0	0	0	0	0
46	3	1	3	2	1	0	0	0	0
47	1	1	2	4	0	0	0	0	0
48	1	1	1	3	0	0	0	0	0
49	4	1	1	1	0	0	0	0	0
50	3	1	3	3	0	0	0	0	0
51	1	1	4	2	0	0	0	0	0
52	8	1	1	4	0	0	0	0	0
53	2	1	1	2	0	0	0	0	0
54	1	1	1	2	0	0	0	0	0
55	0	0	3	1	0	0	0	0	0
56	1	1	1	4	0	0	0	0	0
57	2	1	1	1	0	0	0	0	0
58	2	1	1	1	0	0	0	0	0
59	2	1	3	4	0	0	0	0	0
60									

1									
2									
3	1	1	2	2	0	0	0	0	0
4	0	0	3	4	0	0	0	0	0
5	1	1	3	4	0	0	0	0	0
6	1	1	1	1	0	0	0	0	0
7	1	1	4	2	0	0	0	0	0
8	1	1	2	4	0	0	0	0	0
9	2	1	3	4	0	0	0	0	0
10	2	1	1	3	0	0	0	0	0
11	1	1	2	3	0	0	0	0	0
12	2	1	1	1	0	0	0	0	0
13	2	1	3	2	0	0	0	0	0
14	1	1	4	2	0	1	0	0	0
15	1	1	1	2	0	0	0	0	0
16	1	1	2	2	0	0	0	0	0
17	1	1	4	1	0	0	0	0	0
18	1	1	1	3	0	0	0	0	0
19	1	1	1	4	1	0	0	0	0
20	1	1	2	1	0	0	0	0	0
21	1	1	3	4	0	0	0	0	0
22	1	1	1	2	0	0	0	0	0
23	1	1	2	2	0	0	0	0	0
24	1	1	2	2	0	0	0	0	0
25	2	1	1	2	0	0	0	0	0
26	2	1	4	1	1	0	0	0	0
27	2	1	3	3	0	0	0	0	0
28	3	1	3	2	0	0	0	0	0
29	1	1	4	3	0	0	0	0	0
30	4	1	3	4	0	0	0	0	0
31	2	1	4	1	0	1	0	0	0
32	1	1	2	1	0	0	0	0	0
33	3	1	1	2	0	0	0	0	0
34	0	0	4	1	0	0	0	0	0
35	1	1	1	4	0	0	0	0	0
36	1	1	3	4	0	0	0	0	0
37	1	1	1	1	0	0	0	0	0
38	2	1	3	2	0	0	0	0	0
39	1	1	4	1	0	0	0	0	0
40	0	0	1	2	0	0	0	0	0
41	2	1	3	4	0	0	0	0	0
42	5	1	2	4	0	0	0	0	0
43	1	1	2	1	0	0	0	0	0
44	8	1	3	4	0	0	0	0	0
45	2	1	1	3	0	0	0	0	0
46	1	1	1	2	1	0	0	0	0
47	5	1	1	1	0	0	0	0	0
48	2	1	2	3	0	0	0	0	0
49	1	1	1	3	0	0	0	0	0
50	1	1	2	2	0	0	0	0	0
51	1	1	1	3	0	0	0	0	0
52	2	1	2	2	0	0	0	0	0
53	0	0	3	4	0	0	0	0	0
54	3	1	1	3	0	0	0	0	0
55	1	1	3	3	0	1	0	0	0
56	1	1	4	2	0	0	0	0	0
57	1	1	2	2	0	0	0	0	0
58	1	1	1	4	0	0	0	0	0
59	1	1	3	4	0	0	0	0	0
60	1	1	3	4	0	0	0	0	0

1									
2									
3	5	1	1	3	1	0	0	0	0
4	1	1	3	1	0	0	0	0	0
5	0	0	1	3	0	0	0	0	0
6	3	1	3	4	0	0	0	0	0
7	1	1	2	2	0	0	0	0	0
8	1	1	3	4	0	0	0	0	0
9	1	1	3	1	1	0	0	0	0
10	2	1	1	2	0	0	0	0	0
11	2	1	3	4	0	0	0	0	0
12	3	1	4	1	1	0	0	0	0
13	4	1	1	1	0	0	0	0	0
14	2	1	1	3	0	0	0	0	0
15	1	1	4	4	1	0	0	0	0
16	5	1	4	2	0	0	0	0	0
17	3	1	1	2	0	0	0	0	0
18	3	1	1	2	0	0	0	0	0
19	1	1	4	2	0	0	0	0	0
20	2	1	4	1	0	0	0	0	0
21	1	1	3	3	1	0	0	0	0
22	3	1	3	4	0	0	0	0	0
23	3	1	3	4	0	0	0	0	0
24	3	1	1	1	0	0	0	0	0
25	0	0	2	1	0	0	0	0	0
26	0	0	1	1	0	0	0	0	0
27	1	1	4	1	0	0	0	0	0
28	4	1	2	2	0	0	0	0	0
29	0	0	1	1	0	0	0	0	0
30	1	1	3	4	0	0	0	0	0
31	1	1	2	1	1	0	0	0	0
32	1	1	1	1	1	0	0	0	0
33	1	1	1	4	0	0	0	0	0
34	1	1	1	3	0	0	0	0	0
35	1	1	3	2	0	0	0	0	0
36	1	1	2	4	0	0	0	0	0
37	3	1	2	2	0	0	0	0	0
38	1	1	1	1	0	0	0	0	0
39	3	1	1	4	0	0	0	0	0
40	2	1	2	1	0	0	0	0	0
41	1	1	1	4	0	0	0	0	0
42	2	1	1	2	0	0	0	0	0
43	2	1	4	2	0	0	0	0	0
44	2	1	2	3	0	0	0	0	0
45	0	0	4	1	0	0	0	0	0
46	1	1	3	1	0	0	0	0	0
47	2	1	2	4	0	0	0	0	0
48	1	1	2	1	0	0	0	0	0
49	1	1	2	3	0	0	0	0	0
50	2	1	3	3	0	0	0	0	0
51	1	1	3	4	0	0	0	0	0
52	2	1	2	1	0	0	0	0	0
53	1	1	2	1	0	0	0	0	0
54	1	1	3	4	0	0	0	0	1
55	1	1	1	3	0	0	0	0	0
56	1	1	3	4	1	0	0	0	0
57	1	1	1	2	0	1	0	0	0
58	1	1	1	3	0	0	0	0	0
59	1	1	1	3	0	0	0	0	0
60	3	1	3	3	0	0	0	0	0

1									
2									
3	2	1	3	4	0	0	0	0	0
4	1	1	1	1	0	0	0	0	0
5	1	1	4	4	0	0	0	0	0
6	4	1	2	2	0	0	0	0	0
7	2	1	1	3	0	0	0	0	0
8	0	0	4	3	0	0	0	0	0
9	2	1	1	3	0	0	0	0	0
10	2	1	2	1	0	0	0	0	0
11	2	1	2	4	1	0	0	0	0
12	1	1	4	2	0	0	0	0	0
13	1	1	2	2	0	0	0	0	0
14	2	1	4	3	0	0	0	0	0
15	7	1	2	2	0	0	0	0	0
16	0	0	2	2	0	0	0	0	0
17	1	1	4	1	0	0	0	0	0
18	4	1	2	3	0	0	0	0	0
19	1	1	4	1	0	0	0	0	0
20	1	1	4	2	0	0	0	0	1
21	3	1	3	3	0	0	0	0	0
22	2	1	1	1	0	0	0	0	0
23	1	1	1	4	0	0	0	0	0
24	1	1	4	1	0	0	0	0	0
25	3	1	4	1	0	0	0	0	0
26	1	1	4	1	0	0	0	0	0
27	1	1	4	1	0	0	0	0	0
28	1	1	2	2	0	0	0	0	0
29	10	1	1	4	0	0	0	0	0
30	1	1	1	2	0	0	0	0	0
31	1	1	3	4	0	0	0	0	0
32	2	1	2	1	0	0	0	0	0
33	1	1	2	4	0	0	0	0	0
34	3	1	4	1	1	0	0	0	1
35	2	1	3	4	0	0	0	0	0
36	1	1	3	4	0	0	0	0	0
37	3	1	1	4	0	0	0	0	0
38	1	1	2	4	0	0	0	0	0
39	3	1	3	4	0	1	0	0	0
40	2	1	4	3	0	0	0	0	0
41	1	1	1	2	0	0	0	0	0
42	2	1	1	1	0	0	0	0	0
43	1	1	1	1	0	0	0	0	0
44	1	1	2	3	1	0	0	0	0
45	1	1	1	1	0	0	0	0	0
46	1	1	3	4	0	0	0	0	0
47	1	1	1	3	0	0	0	0	0
48	1	1	4	2	0	0	0	0	0
49	2	1	3	2	0	0	0	0	0
50	2	1	1	1	0	0	0	0	0
51	1	1	4	2	0	0	0	0	0
52	2	1	2	1	0	0	0	0	0
53	1	1	3	4	0	0	0	0	0
54	3	1	3	4	0	0	0	0	0
55	4	1	2	1	0	0	0	0	0
56	1	1	4	2	0	0	0	0	0
57	2	1	3	3	0	0	0	0	0
58	1	1	3	4	0	0	0	0	0
59	1	1	3	3	0	0	0	0	0
60	1	1	3	3	0	0	0	0	0

1									
2									
3	2	1	2	1	0	0	0	0	0
4	1	1	3	3	1	0	0	0	0
5	1	1	4	2	0	0	0	0	0
6	1	1	1	2	0	0	0	0	0
7	2	1	3	4	0	0	0	0	0
8	0	0	1	1	0	0	0	0	0
9	0	0	1	3	0	0	0	0	0
10	1	1	1	3	0	0	0	0	0
11	0	0	3	1	0	0	0	0	0
12	1	1	1	1	0	0	0	0	0
13	1	1	3	4	0	0	0	0	0
14	2	1	2	2	0	0	0	0	0
15	1	1	1	4	0	0	0	0	0
16	1	1	4	1	0	0	0	0	0
17	3	1	3	2	0	0	0	0	0
18	2	1	2	3	0	0	0	0	0
19	2	1	4	4	0	0	0	0	0
20	0	0	2	1	0	0	0	0	0
21	2	1	4	1	0	0	0	0	0
22	1	1	3	2	0	1	0	0	0
23	1	1	4	1	0	0	0	0	0
24	5	1	3	1	0	0	0	0	0
25	1	1	4	2	0	0	0	0	0
26	1	1	3	1	0	0	0	0	0
27	0	0	2	2	0	0	0	0	0
28	2	1	3	4	0	0	0	0	0
29	1	1	1	2	0	0	0	0	0
30	3	1	1	1	0	0	0	0	0
31	2	1	3	4	0	0	0	0	0
32	0	0	4	2	0	0	0	0	0
33	3	1	4	2	0	0	0	0	0
34	1	1	3	4	0	0	0	0	0
35	2	1	4	2	0	0	0	0	0
36	1	1	4	1	0	0	0	0	0
37	2	1	1	2	0	0	0	0	0
38	5	1	2	4	0	0	0	0	0
39	2	1	1	1	0	0	0	0	0
40	3	1	3	4	0	0	0	0	0
41	1	1	2	3	0	0	0	0	0
42	4	1	1	1	0	0	0	0	0
43	3	1	1	4	0	0	0	0	0
44	2	1	3	4	0	0	0	0	0
45	1	1	2	4	0	0	0	0	0
46	5	1	2	4	0	0	0	0	0
47	4	1	1	3	0	0	0	0	0
48	2	1	1	3	0	0	0	0	0
49	1	1	4	4	0	0	0	0	0
50	1	1	1	3	0	0	0	0	0
51	5	1	4	4	0	0	0	0	0
52	2	1	2	1	0	0	0	0	0
53	2	1	3	1	0	0	0	0	0
54	1	1	1	4	1	0	0	0	0
55	2	1	1	2	0	0	0	0	0
56	2	1	1	1	0	0	0	0	0
57	1	1	1	2	0	0	0	0	0
58	2	1	2	4	0	0	0	0	0
59	1	1	1	1	0	0	0	0	0
60	2	1	2	4	0	0	0	0	0

1									
2									
3	2	1	1	1	0	0	0	0	0
4	2	1	1	1	0	0	0	0	0
5	2	1	2	2	0	0	0	0	0
6	4	1	2	2	1	0	0	0	0
7	1	1	4	2	0	0	0	0	0
8	0	0	3	2	0	0	0	0	0
9	1	1	3	4	1	0	0	0	0
10	2	1	1	4	0	0	0	0	0
11	2	1	1	4	0	0	0	0	0
12	2	1	1	2	0	1	0	0	0
13	1	1	1	4	0	0	0	0	0
14	5	1	3	4	1	0	0	0	0
15	1	1	1	1	0	0	0	0	0
16	6	1	1	3	0	0	0	0	0
17	1	1	1	2	0	0	0	0	0
18	1	1	1	4	0	0	0	0	0
19	1	1	4	1	0	0	0	0	0
20	1	1	1	2	0	0	0	0	0
21	2	1	3	2	0	0	0	0	0
22	2	1	3	4	0	0	0	0	0
23	1	1	2	3	0	0	0	0	0
24	1	1	4	3	0	0	0	0	0
25	1	1	4	3	0	0	0	0	0
26	1	1	4	1	1	0	0	0	0
27	6	1	1	2	0	0	0	0	0
28	0	0	4	1	0	0	0	0	0
29	1	1	1	4	0	0	0	0	0
30	4	1	3	2	0	0	0	0	0
31	11	1	4	1	0	0	0	0	0
32	1	1	3	1	0	0	0	0	0
33	1	1	1	3	1	0	0	0	0
34	1	1	4	3	0	0	0	0	0
35	1	1	3	1	0	0	0	0	0
36	1	1	4	1	0	0	0	0	0
37	1	1	1	1	0	0	0	0	0
38	2	1	1	1	0	0	0	0	0
39	3	1	1	2	1	0	0	0	0
40	1	1	1	4	1	0	0	0	0
41	3	1	4	3	0	0	0	0	0
42	1	1	3	1	0	0	0	0	0
43	1	1	3	1	0	0	0	0	0
44	2	1	3	4	0	0	0	0	0
45	3	1	4	2	0	0	0	0	0
46	0	0	1	1	0	0	0	0	0
47	0	0	4	1	0	0	0	0	0
48	3	1	2	2	0	0	0	0	0
49	7	1	2	1	0	0	0	0	0
50	7	1	1	2	0	0	0	0	0
51	1	1	1	2	0	0	0	0	0
52	1	1	1	4	0	0	0	0	0
53	6	1	1	3	0	0	0	0	0
54	6	1	1	1	0	0	0	0	0
55	1	1	1	4	0	0	0	0	0
56	2	1	4	2	1	0	0	0	0
57	1	1	1	1	0	0	0	0	0
58	1	1	3	4	1	0	0	0	1
59	1	1	4	1	0	0	0	0	0
60	1	1	4	1	0	0	0	0	0

1									
2									
3	1	1	1	2	0	1	0	0	0
4	5	1	3	3	0	0	0	0	0
5	0	0	3	4	0	0	0	0	0
6	2	1	3	2	0	0	0	0	1
7	1	1	1	4	0	0	0	0	0
8	3	1	3	4	0	0	0	0	0
9	1	1	1	4	0	0	0	0	0
10	1	1	3	4	0	0	0	0	0
11	1	1	4	2	1	0	0	0	0
12	1	1	2	2	0	0	0	0	0
13	2	1	4	1	0	0	0	0	0
14	1	1	3	4	0	1	0	0	0
15	3	1	1	4	0	0	0	0	0
16	1	1	1	4	1	0	0	0	0
17	1	1	3	3	0	0	0	0	0
18	3	1	3	4	0	0	0	0	0
19	4	1	1	3	0	0	0	0	0
20	1	1	1	3	0	0	0	0	0
21	0	0	2	2	0	0	0	0	0
22	4	1	2	1	0	0	0	0	0
23	2	1	1	2	1	0	0	0	0
24	1	1	3	4	0	0	0	0	0
25	1	1	2	3	0	0	0	0	0
26	1	1	2	3	0	0	0	0	0
27	0	0	4	1	0	0	0	0	0
28	1	1	4	4	0	0	0	0	0
29	1	1	3	2	0	0	0	0	0
30	2	1	3	4	0	0	0	0	0
31	1	1	1	2	0	0	0	0	0
32	1	1	2	3	0	0	0	0	0
33	2	1	1	3	0	0	0	0	1
34	1	1	1	3	0	0	0	0	0
35	0	0	1	2	0	0	0	0	0
36	1	1	1	4	0	0	0	0	0
37	3	1	3	4	0	0	0	0	0
38	1	1	1	1	0	0	0	0	0
39	1	1	3	4	0	0	0	0	0
40	1	1	1	1	1	0	0	0	0
41	1	1	1	2	0	0	0	0	0
42	2	1	1	2	0	0	0	0	0
43	5	1	3	3	0	0	0	0	0
44	3	1	3	2	0	1	0	0	0
45	1	1	1	4	0	1	0	0	0
46	1	1	1	2	0	0	0	0	0
47	1	1	1	4	0	0	0	0	0
48	2	1	3	4	0	0	0	0	0
49	2	1	3	1	0	1	0	0	0
50	2	1	1	2	0	0	0	0	0
51	2	1	3	1	0	0	0	0	0
52	0	0	2	2	0	0	0	0	0
53	3	1	1	2	0	0	0	0	0
54	1	1	2	1	0	0	0	0	0
55	2	1	2	1	0	0	0	0	0
56	2	1	2	1	0	0	0	0	0
57	2	1	3	4	0	0	0	0	0
58	1	1	2	3	0	0	0	0	0
59	1	1	1	2	0	0	0	0	0
60	1	1	1	2	0	0	0	0	0

1									
2									
3	1	1	1	3	0	0	0	0	0
4	0	0	3	2	0	0	0	0	0
5	3	1	3	3	1	0	0	0	0
6	1	1	2	1	0	0	0	0	0
7	2	1	2	1	0	0	0	0	0
8	2	1	1	2	0	0	0	0	0
9	1	1	3	1	0	0	0	0	0
10	1	1	2	2	0	0	0	0	0
11	2	1	3	3	0	0	0	0	0
12	1	1	3	1	0	0	0	0	0
13	3	1	2	2	1	0	0	0	0
14	1	1	1	3	0	0	0	0	1
15	2	1	2	3	0	0	0	0	0
16	1	1	2	2	0	0	0	0	0
17	1	1	1	1	0	0	0	0	0
18	1	1	1	4	0	0	0	0	0
19	2	1	3	4	0	0	0	0	0
20	2	1	3	4	0	0	0	0	0
21	2	1	3	4	0	0	0	0	0
22	1	1	3	4	0	0	0	0	0
23	3	1	1	4	0	0	0	0	0
24	1	1	3	3	1	0	0	0	0
25	1	1	1	1	0	0	0	0	0
26	2	1	3	2	0	0	0	0	0
27	2	1	4	2	0	1	0	0	0
28	0	0	1	2	0	0	0	0	0
29	1	1	3	2	0	0	0	0	0
30	4	1	3	4	0	0	0	0	0
31	1	1	4	2	0	0	0	0	0
32	2	1	3	2	0	0	0	0	0
33	1	1	1	3	0	0	0	0	0
34	1	1	4	1	0	0	0	0	0
35	2	1	1	1	0	0	0	0	0
36	2	1	3	4	0	0	0	0	0
37	1	1	1	3	0	0	0	0	0
38	4	1	2	1	0	0	0	0	0
39	1	1	1	1	0	0	0	0	0
40	2	1	4	3	0	0	0	0	0
41	1	1	1	2	0	0	0	0	0
42	2	1	1	1	0	0	0	0	0
43	1	1	3	4	0	0	0	0	0
44	2	1	3	2	0	0	0	0	0
45	2	1	1	2	0	0	0	0	0
46	1	1	1	1	0	0	0	0	0
47	0	0	1	4	0	0	0	0	0
48	1	1	2	4	0	0	1	0	0
49	1	1	1	4	0	0	0	0	0
50	4	1	3	2	0	0	0	0	0
51	1	1	2	4	0	0	0	0	0
52	1	1	1	1	0	0	0	0	0
53	2	1	1	1	0	0	0	0	1
54	1	1	1	3	1	0	0	0	0
55	0	0	1	1	0	0	0	0	0
56	1	1	3	4	0	0	0	0	0
57	1	1	3	4	0	0	0	0	0
58	0	0	2	2	0	0	0	0	0
59	0	0	2	2	0	0	0	0	0
60	3	1	3	4	1	0	0	0	0



1									
2									
3	1	1	3	4	0	0	0	0	0
4	1	1	1	1	0	0	0	0	0
5	2	1	4	1	1	0	0	0	0
6	2	1	1	2	0	0	0	0	0
7	1	1	1	2	0	0	0	0	0
8	1	1	1	3	0	0	0	0	0
9	2	1	3	4	0	0	0	0	0
10	0	0	3	4	0	0	0	0	0
11	0	0	2	2	0	0	0	0	0
12	2	1	1	3	0	0	0	0	0
13	1	1	1	2	0	0	0	0	0
14	3	1	2	4	0	0	0	0	0
15	0	0	3	4	0	0	0	0	0
16	5	1	1	4	0	0	0	0	0
17	1	1	3	3	0	0	0	0	0
18	2	1	3	4	0	0	0	0	0
19	2	1	3	4	0	0	0	0	0
20	2	1	3	4	0	0	0	0	0
21	3	1	3	1	0	0	0	0	0
22	0	0	2	2	0	0	0	0	0
23	4	1	1	1	0	0	0	0	0
24	1	1	1	1	0	0	0	0	0
25	0	0	2	2	0	0	0	0	0
26	1	1	2	2	0	0	0	0	0
27	2	1	2	3	0	0	0	0	0
28	3	1	1	2	1	0	0	0	0
29	2	1	2	2	0	0	0	0	0
30	1	1	3	1	0	0	0	0	0
31	0	0	1	1	0	0	0	0	0
32	1	1	2	3	0	0	0	0	0
33	10	1	1	4	0	0	0	0	0
34	1	1	2	2	0	0	0	0	0
35	1	1	2	4	0	0	0	0	0
36	3	1	1	1	0	0	0	0	0
37	2	1	2	2	0	0	0	0	0
38	3	1	1	2	0	0	0	0	0
39	1	1	1	1	0	0	0	0	0
40	1	1	1	2	0	0	0	0	0
41	1	1	3	4	0	0	0	0	0
42	1	1	1	1	0	0	0	0	0
43	0	0	1	4	0	0	0	0	0
44	2	1	1	3	0	1	0	0	0
45	3	1	3	4	1	0	0	0	0
46	3	1	1	1	0	1	0	0	0
47	2	1	3	4	0	0	0	0	0
48	2	1	2	2	0	0	0	0	0
49	1	1	1	2	0	0	0	0	0
50	1	1	3	4	0	0	0	0	0
51	1	1	3	2	0	0	0	0	0
52	5	1	1	1	0	0	0	0	0
53	2	1	1	1	0	0	0	0	0
54	1	1	2	3	0	0	0	0	0
55	2	1	1	1	0	0	0	0	0
56	2	1	1	3	0	0	0	0	0
57	2	1	1	3	0	0	0	0	0
58	2	1	1	3	0	0	0	0	0
59	3	1	3	4	0	0	0	0	0
60	1	1	3	4	0	0	0	0	0

1									
2									
3	2	1	1	2	0	0	0	0	0
4	1	1	3	3	0	0	0	0	0
5	2	1	2	1	0	0	0	0	0
6	2	1	4	1	0	0	0	0	0
7	0	0	3	4	0	0	0	0	0
8	0	0	3	1	0	0	0	0	0
9	3	1	3	4	0	0	0	0	0
10	3	1	1	4	0	0	0	0	0
11	2	1	4	2	0	0	0	0	0
12	3	1	1	1	0	0	0	0	0
13	1	1	1	1	0	0	0	0	0
14	1	1	3	4	0	0	0	0	0
15	0	0	2	4	0	0	0	0	0
16	1	1	1	1	0	0	0	0	0
17	1	1	4	1	0	0	0	0	0
18	2	1	2	2	0	0	0	0	0
19	6	1	1	4	1	0	0	0	0
20	1	1	3	3	0	0	0	0	0
21	1	1	4	4	0	1	0	0	0
22	1	1	4	1	0	0	0	0	0
23	5	1	3	4	0	0	0	0	0
24	1	1	1	2	0	0	0	0	0
25	2	1	1	2	0	0	0	0	0
26	2	1	1	2	0	0	0	0	0
27	2	1	4	1	0	0	0	0	0
28	1	1	2	3	0	0	0	0	0
29	1	1	3	2	0	0	0	0	0
30	3	1	1	3	0	0	0	0	0
31	4	1	1	1	0	0	0	0	0
32	1	1	3	2	0	1	0	0	0
33	1	1	3	1	0	1	0	0	0
34	3	1	2	1	0	0	0	0	0
35	1	1	2	4	0	0	0	0	0
36	0	0	3	4	0	0	0	0	0
37	1	1	1	1	0	0	0	0	0
38	1	1	4	2	0	0	0	0	0
39	2	1	3	4	0	0	0	0	0
40	10	1	2	2	0	0	0	0	0
41	2	1	2	3	0	0	0	0	0
42	0	0	1	1	0	0	0	0	0
43	1	1	4	2	0	1	0	0	1
44	3	1	1	1	0	0	0	0	0
45	2	1	1	2	1	0	0	0	0
46	2	1	1	3	0	0	0	0	0
47	3	1	3	4	0	0	0	0	0
48	2	1	1	4	0	0	0	0	0
49	1	1	3	2	0	0	0	0	0
50	0	0	2	4	0	0	0	0	0
51	1	1	4	1	0	1	0	0	0
52	0	0	1	2	0	0	0	0	0
53	1	1	1	1	0	0	0	0	0
54	9	1	3	4	0	0	0	0	0
55	0	0	1	2	0	0	0	0	0
56	1	1	1	1	0	0	0	0	0
57	1	1	4	2	0	0	0	0	0
58	0	0	2	3	0	0	0	0	0
59	1	1	3	1	0	0	0	0	0
60									

1									
2									
3	4	1	1	1	0	0	0	0	0
4	2	1	2	2	0	0	0	0	0
5	1	1	3	2	0	1	0	0	0
6	2	1	4	2	0	0	0	0	0
7	1	1	3	2	0	0	0	0	0
8	0	0	1	2	0	0	0	0	0
9	2	1	2	4	0	0	0	0	0
10	4	1	2	4	0	0	0	0	0
11	1	1	2	2	0	0	0	0	0
12	1	1	1	2	0	0	0	0	0
13	1	1	4	2	0	0	0	0	0
14	2	1	1	2	0	0	0	0	0
15	9	1	3	4	0	0	0	0	0
16	1	1	4	2	0	0	0	0	0
17	1	1	4	1	0	0	0	0	0
18	1	1	4	1	0	0	0	0	0
19	1	1	3	4	0	0	0	0	0
20	0	0	2	1	0	0	0	0	0
21	1	1	2	3	0	0	0	0	0
22	1	1	3	2	0	0	0	0	0
23	1	1	3	2	0	0	0	0	0
24	1	1	1	2	0	0	0	0	0
25	0	0	4	4	0	0	0	0	0
26	1	1	2	2	0	0	0	0	0
27	1	1	3	2	0	0	0	0	0
28	5	1	2	2	0	0	0	0	0
29	2	1	2	1	0	0	0	0	0
30	1	1	4	2	0	0	0	0	0
31	1	1	1	1	0	0	0	0	0
32	1	1	4	2	0	0	0	0	0
33	0	0	3	1	0	0	0	0	0
34	1	1	1	3	0	0	0	0	0
35	1	1	3	4	0	0	0	0	0
36	3	1	3	4	0	0	0	0	0
37	0	0	3	1	0	0	0	0	0
38	2	1	1	4	0	0	0	0	0
39	1	1	3	3	0	0	0	0	0
40	1	1	3	1	0	0	0	0	0
41	3	1	1	1	0	0	0	0	0
42	11	1	3	3	0	0	0	0	0
43	3	1	1	3	0	0	0	0	0
44	0	0	3	2	0	0	0	0	0
45	11	1	1	3	0	0	0	0	0
46	1	1	1	3	0	0	0	0	0
47	1	1	2	4	0	0	0	0	0
48	1	1	2	4	0	0	0	0	0
49	2	1	1	4	0	0	0	0	0
50	1	1	4	1	0	0	0	0	0
51	1	1	3	4	0	0	0	0	0
52	3	1	2	1	0	0	0	0	0
53	5	1	2	1	0	0	0	0	0
54	1	1	3	1	1	0	0	0	0
55	2	1	1	2	0	0	0	0	0
56	0	0	1	4	0	0	0	0	0
57	0	0	4	2	0	0	0	0	0
58	0	0	1	2	0	0	0	0	0
59	0	0	1	2	0	0	0	0	0
60	1	1	2	4	0	0	0	0	0

1									
2									
3	1	1	2	1	0	0	0	0	0
4	1	1	3	2	0	0	0	0	0
5	4	1	3	2	0	0	0	0	0
6	3	1	3	4	0	0	0	0	0
7	1	1	3	4	0	0	0	0	0
8	0	0	4	1	0	0	0	0	0
9	1	1	2	4	0	0	0	0	0
10	1	1	1	3	0	0	0	0	0
11	1	1	2	1	0	0	0	0	0
12	0	0	4	1	0	0	0	0	0
13	1	1	1	1	0	0	0	0	0
14	10	1	2	2	0	0	0	0	0
15	2	1	4	4	0	0	0	0	0
16	0	0	1	2	0	0	0	0	0
17	0	0	3	4	0	0	0	0	0
18	1	1	4	2	0	0	0	0	0
19	2	1	1	3	0	0	0	0	0
20	1	1	2	2	0	0	0	0	0
21	1	1	2	1	0	0	0	0	0
22	3	1	1	4	0	0	0	0	0
23	2	1	3	3	0	0	0	0	0
24	3	1	4	2	0	0	0	0	0
25	2	1	3	2	0	0	0	0	0
26	0	0	4	2	0	0	0	0	0
27	1	1	2	2	0	0	0	0	0
28	1	1	2	3	0	0	0	0	0
29	1	1	4	4	0	0	0	0	0
30	1	1	2	3	0	0	0	0	0
31	3	1	4	4	0	0	0	0	0
32	1	1	1	1	0	0	0	0	0
33	1	1	2	4	0	0	0	0	0
34	2	1	4	3	0	0	0	0	0
35	1	1	4	2	0	0	0	0	0
36	1	1	2	1	0	0	0	0	0
37	1	1	4	1	0	0	0	0	0
38	1	1	1	1	0	0	0	0	0
39	1	1	3	4	0	0	0	0	0
40	1	1	3	4	0	0	0	0	0
41	0	0	3	4	0	0	0	0	0
42	1	1	2	1	0	0	0	0	0
43	0	0	4	1	0	0	0	0	0
44	2	1	4	1	0	0	0	0	0
45	0	0	3	4	0	0	0	0	0
46	2	1	4	1	0	0	0	0	0
47	1	1	3	2	0	0	0	0	0
48	1	1	4	2	0	0	0	0	0
49	1	1	3	4	0	0	0	0	0
50	8	1	4	3	0	0	0	0	0
51	1	1	1	2	0	0	0	0	0
52	1	1	3	1	0	0	0	0	0
53	1	1	3	2	0	0	0	0	0
54	0	0	4	1	0	0	0	0	0
55	1	1	4	1	0	0	0	0	0
56	1	1	3	4	0	0	0	0	0
57	0	0	4	2	0	0	0	0	0
58	1	1	1	4	0	0	0	0	0
59	2	1	3	4	0	0	0	0	0
60									

1									
2									
3	1	1	3	3	0	0	0	0	0
4	1	1	1	4	0	0	0	0	0
5	1	1	1	1	0	0	0	0	0
6	1	1	3	1	0	0	0	0	0
7	0	0	2	4	0	0	0	0	0
8	1	1	1	1	0	0	0	0	0
9	2	1	4	1	0	0	0	0	0
10	1	1	1	2	0	0	0	0	0
11	1	1	3	4	0	0	0	0	0
12	1	1	4	2	0	0	0	0	0
13	1	1	1	2	0	0	0	0	0
14	2	1	1	4	0	0	0	0	0
15	2	1	4	3	0	0	0	0	0
16	3	1	3	1	0	0	0	0	0
17	2	1	1	1	0	0	0	0	0
18	4	1	1	1	0	0	0	0	0
19	2	1	3	1	0	0	0	0	0
20	2	1	4	3	0	0	0	0	0
21	1	1	4	1	0	0	0	0	0
22	2	1	4	3	0	0	0	0	0
23	1	1	1	3	0	0	0	0	0
24	1	1	1	1	0	0	0	0	0
25	0	0	4	2	0	0	0	0	0
26	1	1	4	1	0	0	0	0	0
27	1	1	2	4	0	0	0	0	0
28	0	0	3	1	0	0	0	0	0
29	0	0	1	4	0	0	0	0	0
30	2	1	4	1	0	0	0	0	0
31	1	1	3	1	0	0	0	0	0
32	0	0	2	1	0	0	0	0	0
33	1	1	3	4	0	0	0	0	0
34	0	0	2	2	0	0	0	0	0
35	5	1	2	3	0	0	0	0	0
36	0	0	2	3	0	0	0	0	0
37	2	1	1	1	0	0	0	0	0
38	0	0	2	1	0	0	0	0	0
39	0	0	4	3	0	0	0	0	0
40	1	1	2	2	0	0	0	0	0
41	0	0	4	1	0	0	0	0	0
42	3	1	2	2	0	0	0	0	0
43	9	1	3	4	0	0	0	0	0
44	1	1	4	4	0	0	0	0	0
45	1	1	2	1	0	0	0	0	0
46	2	1	1	2	0	0	0	0	0
47	1	1	2	2	0	0	0	0	0
48	1	1	4	1	0	0	0	0	0
49	1	1	3	2	0	0	0	0	0
50	3	1	1	4	0	0	0	0	0
51	1	1	4	2	0	0	0	0	0
52	2	1	3	2	0	0	0	0	0
53	2	1	3	4	0	0	0	0	0
54	2	1	1	2	0	0	0	0	0
55	1	1	4	3	0	0	0	0	0
56	1	1	1	2	0	0	0	0	0
57	1	1	1	3	0	0	0	0	0
58	4	1	1	2	0	0	0	0	0
59	1	1	4	4	0	0	0	0	0
60	1	1	4	4	0	0	0	0	0

1									
2									
3	1	1	1	2	0	0	0	0	0
4	3	1	2	2	0	0	0	0	0
5	1	1	2	2	0	0	0	0	0
6	2	1	3	4	0	0	0	0	0
7	0	0	3	4	0	0	0	0	0
8	1	1	4	1	0	0	0	0	0
9	1	1	4	1	0	0	0	0	0
10	2	1	3	2	0	0	0	0	0
11	0	0	1	2	0	0	0	0	0
12	1	1	4	2	0	0	0	0	0
13	1	1	4	2	0	0	0	0	0
14	1	1	2	1	0	0	0	0	0
15	4	1	1	2	0	0	0	0	0
16	1	1	4	2	0	0	0	0	0
17	1	1	4	3	0	0	0	0	0
18	1	1	4	2	0	0	0	0	0
19	2	1	2	1	0	0	0	0	0
20	2	1	3	1	0	0	0	0	0
21	1	1	4	1	0	0	0	0	0
22	1	1	2	4	0	0	0	0	0
23	0	0	4	3	0	0	0	0	0
24	1	1	1	2	0	0	0	0	0
25	3	1	1	4	0	0	0	0	0
26	0	0	1	3	0	0	0	0	0
27	5	1	3	4	0	0	0	0	0
28	1	1	3	2	0	0	0	0	0
29	1	1	3	2	0	0	0	0	0
30	3	1	4	2	0	0	0	0	0
31	1	1	4	2	0	0	0	0	0
32	1	1	2	1	0	0	0	0	0
33	2	1	4	3	0	0	0	0	0
34	1	1	4	2	0	0	0	0	0
35	2	1	1	4	0	0	0	0	0
36	1	1	1	4	0	0	0	0	0
37	1	1	2	2	0	0	0	0	0
38	1	1	1	2	0	0	0	0	0
39	2	1	1	3	0	0	0	0	0
40	1	1	4	2	0	0	0	0	0
41	0	0	2	1	0	0	0	0	0
42	6	1	1	2	0	0	0	0	0
43	0	0	2	2	0	0	0	0	0
44	0	0	4	2	0	0	0	0	0
45	0	0	3	2	0	0	0	0	0
46	2	1	4	1	0	0	0	0	0
47	0	0	1	1	0	0	0	0	0
48	0	0	2	2	0	0	0	0	0
49	2	1	1	1	0	0	0	0	0
50	3	1	1	4	0	0	0	0	0
51	0	0	4	4	0	0	0	0	0
52	2	1	1	2	0	0	0	0	0
53	1	1	4	1	0	0	0	0	0
54	4	1	1	2	0	0	0	0	0
55	1	1	4	1	0	0	0	0	0
56	1	1	1	1	0	0	0	0	0
57	1	1	4	1	0	0	0	0	0
58	1	1	1	1	0	0	0	0	0
59	3	1	1	1	0	0	0	0	0
60									

1									
2									
3	1	1	3	2	0	0	0	0	0
4	0	0	4	2	0	0	0	0	0
5	1	1	2	2	0	0	0	0	0
6	1	1	4	3	0	0	0	0	0
7	3	1	4	2	0	0	0	0	0
8	1	1	1	2	0	0	0	0	0
9	2	1	4	1	0	0	0	0	0
10	1	1	2	2	0	0	0	0	0
11	2	1	4	1	0	0	0	0	0
12	2	1	3	4	0	0	0	0	0
13	1	1	1	1	0	0	0	0	0
14	0	0	1	1	0	0	0	0	0
15	2	1	3	4	0	0	0	0	0
16	2	1	3	4	0	0	0	0	0
17	1	1	3	1	0	0	0	0	0
18	3	1	3	2	0	0	0	0	0
19	6	1	2	2	0	0	0	0	0
20	1	1	4	2	0	0	0	0	0
21	8	1	3	2	0	0	0	0	0
22	0	0	3	2	0	0	0	0	0
23	1	1	1	4	0	0	0	0	0
24	1	1	2	2	0	0	0	0	0
25	1	1	2	2	0	0	0	0	0
26	1	1	2	2	0	0	0	0	0
27	0	0	4	1	0	0	0	0	0
28	3	1	4	2	0	0	0	0	0
29	1	1	2	3	0	0	0	0	0
30	0	0	1	4	0	0	0	0	0
31	0	0	4	3	0	0	0	0	0
32	0	0	4	2	0	0	0	0	0
33	1	1	4	1	0	0	0	0	0
34	0	0	4	2	0	0	0	0	0
35	8	1	4	1	0	0	0	0	0
36	4	1	1	1	0	0	0	0	0
37	0	0	1	3	0	0	0	0	0
38	0	0	2	1	0	0	0	0	0
39	1	1	2	4	0	0	0	0	0
40	5	1	1	2	0	0	0	0	0
41	0	0	4	2	0	0	0	0	0
42	1	1	3	3	0	0	0	0	0
43	2	1	1	2	0	0	0	0	0
44	3	1	1	1	0	0	0	0	0
45	1	1	3	1	0	0	0	0	0
46	0	0	4	1	0	0	0	0	0
47	1	1	2	1	0	0	0	0	0
48	0	0	4	2	0	0	0	0	0
49	0	0	4	3	0	0	0	0	0
50	1	1	4	2	0	0	0	0	0
51	2	1	4	1	0	0	0	0	0
52	0	0	3	1	0	0	0	0	0
53	1	1	1	2	0	0	0	0	0
54	1	1	2	3	0	0	0	0	0
55	0	0	3	1	0	0	0	0	0
56	0	0	3	1	0	0	0	0	0
57	0	0	4	1	0	0	0	0	0
58	0	0	4	3	0	0	0	0	0
59	0	0	4	3	0	0	0	0	0
60	2	1	4	1	0	0	0	0	0

1									
2									
3	0	0	4	2	0	0	0	0	0
4	1	1	4	2	0	0	0	0	0
5	0	0	2	2	0	0	0	0	0
6	4	1	1	1	0	0	0	0	0
7	0	0	3	4	0	0	0	0	0
8	0	0	2	1	0	0	0	0	0
9	1	1	1	3	0	0	0	0	0
10	0	0	1	4	0	0	0	0	0
11	0	0	2	1	0	0	0	0	0
12	0	0	4	2	0	0	0	0	0
13	2	1	1	3	0	0	0	0	0
14	2	1	3	1	0	0	0	0	0
15	4	1	4	3	0	0	0	0	0
16	0	0	4	2	0	0	0	0	0
17	0	0	2	1	0	0	0	0	0
18	1	1	4	1	0	0	0	0	0
19	1	1	4	2	0	0	0	0	0
20	3	1	1	2	0	0	0	0	0
21	0	0	1	1	0	0	0	0	0
22	0	0	4	4	0	0	0	0	0
23	0	0	3	4	0	0	0	0	0
24	2	1	4	1	0	0	0	0	0
25	1	1	4	2	0	0	0	0	0
26	2	1	3	3	0	0	0	0	0
27	1	1	4	1	0	0	0	0	0
28	0	0	2	1	0	0	0	0	0
29	0	0	3	2	0	0	0	0	0
30	2	1	4	1	0	0	0	0	0
31	0	0	3	2	0	0	0	0	0
32	2	1	3	2	0	0	0	0	0
33	0	0	2	3	0	0	0	0	0
34	0	0	4	2	0	0	0	0	0
35	3	1	2	2	0	0	0	0	0
36	1	1	2	4	0	0	0	0	0
37	0	0	4	3	0	0	0	0	0
38	3	1	1	2	0	0	0	0	0
39	1	1	4	2	0	0	0	0	0
40	0	0	4	4	0	0	0	0	0
41	0	0	3	2	0	0	0	0	0
42	2	1	2	3	0	0	0	0	0
43	1	1	2	3	0	0	0	0	0
44	0	0	3	4	0	0	0	0	0
45	1	1	2	3	0	0	0	0	0
46	0	0	3	4	0	0	0	0	0
47	2	1	3	4	0	0	0	0	0
48	2	1	4	1	0	0	0	0	0
49	2	1	4	3	0	0	0	0	0
50	3	1	1	2	0	0	0	0	0
51	0	0	2	3	0	0	0	0	0
52	1	1	4	2	0	0	0	0	0
53	1	1	3	2	0	0	0	0	0
54	0	0	3	4	0	0	0	0	0
55	1	1	4	4	0	0	0	0	0
56	1	1	2	4	0	0	0	0	0
57	1	1	4	1	0	0	0	0	0
58	1	1	1	3	0	0	0	0	0
59	1	1	1	3	0	0	0	0	0
60	3	1	3	1	0	0	0	0	0



1									
2									
3	0	0	2	4	0	0	0	0	0
4	3	1	1	3	0	0	0	0	0
5	2	1	2	1	0	0	0	0	0
6	0	0	1	1	0	0	0	0	0
7	0	0	4	1	0	0	0	0	0
8	6	1	2	2	0	0	0	0	0
9	0	0	4	2	0	0	0	0	0
10	1	1	1	3	0	0	0	0	0
11	0	0	3	4	0	0	0	0	0
12	0	0	4	2	0	0	0	0	0
13	0	0	1	4	0	0	0	0	0
14	2	1	3	4	0	0	0	0	0
15	0	0	2	2	0	0	0	0	0
16	0	0	2	4	0	0	0	0	0
17	0	0	4	2	0	0	0	0	0
18	9	1	2	4	0	0	0	0	0
19	0	0	4	1	0	0	0	0	0
20	0	0	4	4	0	0	0	0	0
21	0	0	4	4	0	0	0	0	0
22	0	0	3	4	0	0	0	0	0
23	0	0	2	4	0	0	0	0	0
24	0	0	4	1	0	0	0	0	0
25	0	0	4	2	0	0	0	0	0
26	1	1	4	2	0	0	0	0	0
27	0	0	3	1	0	0	0	0	0
28	1	1	4	4	0	0	0	0	0
29	1	1	2	2	0	0	0	0	0
30	0	0	3	1	0	0	0	0	0
31	0	0	4	3	0	0	0	0	0
32	0	0	2	3	0	0	0	0	0
33	0	0	3	4	0	0	0	0	0
34	1	1	2	3	0	0	0	0	0
35	0	0	4	1	0	0	0	0	0
36	1	1	1	2	0	0	0	0	0
37	1	1	4	4	0	0	0	0	0
38	0	0	4	2	0	0	0	0	0
39	1	1	3	1	0	0	0	0	0
40	0	0	2	4	0	0	0	0	0
41	0	0	4	1	0	0	0	0	0
42	1	1	4	1	0	0	0	0	0
43	2	1	2	1	0	0	0	0	0
44	0	0	3	4	0	0	0	0	0
45	0	0	3	4	0	0	0	0	0
46	1	1	4	1	0	0	0	0	0
47	1	1	4	1	0	0	0	0	0
48	1	1	2	1	0	0	0	0	0
49	1	1	4	4	0	0	0	0	0
50	0	0	1	2	0	0	0	0	0
51	1	1	2	1	0	0	0	0	0
52	1	1	1	3	0	0	0	0	0
53	1	1	1	1	0	0	0	0	0
54	2	1	1	4	0	0	0	0	0
55	4	1	3	2	0	0	0	0	0
56	1	1	1	1	0	0	0	0	0
57	3	1	3	2	0	0	0	0	0
58	4	1	1	3	0	0	0	0	0
59	1	1	4	4	0	0	0	0	0
60									

1									
2									
3	2	1	4	3	0	0	0	0	0
4	1	1	1	2	0	0	0	0	0
5	1	1	3	4	0	0	0	0	0
6	4	1	1	2	0	0	0	0	0
7	1	1	1	2	0	0	0	0	0
8	1	1	2	3	0	0	0	0	0
9	3	1	1	2	0	0	0	0	0
10	1	1	4	2	0	0	0	0	0
11	1	1	4	2	0	0	0	0	0
12	4	1	4	2	0	0	0	0	0
13	2	1	3	4	0	0	0	0	0
14	0	0	1	1	0	0	0	0	0
15	3	1	3	4	0	0	0	0	0
16	1	1	1	3	0	0	0	0	0
17	1	1	1	1	0	0	0	0	0
18	1	1	1	2	0	0	0	0	0
19	2	1	4	4	0	0	0	0	0
20	2	1	2	1	0	0	0	0	0
21	3	1	1	4	0	0	0	0	0
22	1	1	3	4	0	0	0	0	0
23	1	1	3	4	0	0	0	0	0
24	1	1	3	4	0	0	0	0	0
25	1	1	4	1	0	0	0	0	0
26	1	1	4	1	0	0	0	0	0
27	2	1	4	2	0	0	0	0	0
28	1	1	1	3	0	0	0	0	0
29	0	0	4	1	0	0	0	0	0
30	0	0	4	1	0	0	0	0	0
31	1	1	4	1	0	0	0	0	0
32	2	1	3	1	0	0	0	0	0
33	1	1	1	1	0	0	0	0	0
34	0	0	1	1	0	0	0	0	0
35	5	1	2	2	0	0	0	0	0
36	1	1	2	2	0	0	0	0	0
37	1	1	1	2	0	0	0	0	0
38	1	1	1	1	0	0	0	0	0
39	2	1	1	1	0	0	0	0	0
40	0	0	1	4	0	0	0	0	0
41	2	1	2	3	0	0	0	0	0
42	1	1	1	1	0	0	0	0	0
43	1	1	2	2	0	0	0	0	0
44	2	1	3	2	0	0	0	0	0
45	1	1	1	2	0	0	0	0	0
46	2	1	3	3	0	0	0	0	0
47	2	1	2	3	0	0	0	0	0
48	2	1	2	2	0	0	0	0	0
49	3	1	4	1	0	0	0	0	0
50	2	1	1	2	0	0	0	0	0
51	0	0	4	1	0	0	0	0	0
52	1	1	3	1	0	0	0	0	0
53	2	1	3	2	0	0	0	0	0
54	2	1	1	2	0	0	0	0	0
55	1	1	1	3	0	0	0	0	0
56	1	1	1	3	0	0	0	0	0
57	1	1	2	2	0	0	0	0	0
58	2	1	4	2	0	0	0	0	0
59	2	1	4	2	0	0	0	0	0
60	1	1	3	1	0	0	0	0	0

1									
2									
3	1	1	3	1	0	0	0	0	0
4	3	1	3	2	0	0	0	0	0
5	2	1	1	1	0	0	0	0	0
6	1	1	1	1	0	0	0	0	0
7	2	1	2	4	0	0	0	0	0
8	1	1	4	1	0	0	0	0	0
9	3	1	3	4	0	0	0	0	0
10	1	1	1	2	0	0	0	0	0
11	2	1	1	2	0	0	0	0	0
12	2	1	4	2	0	0	0	0	0
13	4	1	1	2	0	0	0	0	0
14	1	1	3	2	0	0	0	0	0
15	0	0	2	2	0	0	0	0	0
16	0	0	3	4	0	0	0	0	0
17	1	1	3	1	0	0	0	0	0
18	0	0	2	2	0	0	0	0	0
19	0	0	4	1	0	0	0	0	0
20	4	1	4	4	0	0	0	0	0
21	0	0	1	1	0	0	0	0	0
22	0	0	2	2	0	0	0	0	0
23	0	0	1	1	0	0	0	0	0
24	1	1	1	4	0	0	0	0	0
25	0	0	3	2	0	0	0	0	0
26	0	0	2	4	0	0	0	0	0
27	1	1	2	1	0	0	0	0	0
28	0	0	1	1	0	0	0	0	0
29	2	1	4	1	0	0	0	0	0
30	1	1	4	1	0	0	0	0	0
31	0	0	3	4	0	0	0	0	0
32	1	1	1	1	0	0	0	0	0
33	0	0	2	2	0	0	0	0	0
34	1	1	4	1	0	0	0	0	0
35	2	1	3	4	0	0	0	0	0
36	3	1	1	1	0	0	0	0	0
37	0	0	3	3	0	0	0	0	0
38	1	1	3	3	0	0	0	0	0
39	1	1	4	2	0	0	0	0	0
40	2	1	3	4	0	0	0	0	0
41	0	0	4	2	0	0	0	0	0
42	1	1	4	2	0	0	0	0	0
43	0	0	4	1	0	0	0	0	0
44	1	1	1	2	0	0	0	0	0
45	1	1	2	2	0	0	0	0	0
46	1	1	3	4	0	0	0	0	0
47	1	1	1	1	0	0	0	0	0
48	2	1	4	4	0	0	0	0	0
49	0	0	1	4	0	0	0	0	0
50	0	0	4	1	0	0	0	0	0
51	1	1	2	1	0	0	0	0	0
52	3	1	3	2	0	0	0	0	0
53	0	0	2	1	0	0	0	0	0
54	0	0	3	2	0	0	0	0	0
55	3	1	3	3	0	0	0	0	0
56	0	0	2	4	0	0	0	0	0
57	3	1	3	3	0	0	0	0	0
58	0	0	2	4	0	0	0	0	0
59	1	1	2	1	0	0	0	0	0
60									

1									
2									
3	2	1	1	1	0	0	0	0	0
4	3	1	1	2	0	0	0	0	0
5	0	0	1	3	0	0	0	0	0
6	2	1	4	2	0	0	0	0	0
7	0	0	1	2	0	0	0	0	0
8	2	1	4	2	0	0	0	0	0
9	0	0	2	4	0	0	0	0	0
10	0	0	4	2	0	0	0	0	0
11	1	1	1	3	0	0	0	0	0
12	0	0	3	3	0	0	0	0	0
13	0	0	1	2	0	0	0	0	0
14	0	0	4	3	0	0	0	0	0
15	0	0	4	2	0	0	0	0	0
16	0	0	3	2	0	0	0	0	0
17	0	0	1	2	0	0	0	0	0
18	0	0	1	2	0	0	0	0	0
19	1	1	3	4	0	0	0	0	0
20	0	0	4	2	0	0	0	0	0
21	0	0	3	1	0	0	0	0	0
22	0	0	1	1	0	0	0	0	0
23	0	0	1	3	0	0	0	0	0
24	1	1	2	1	0	0	0	0	0
25	1	1	3	2	0	0	0	0	0
26	1	1	1	3	0	0	0	0	0
27	2	1	1	4	0	0	0	0	0
28	0	0	4	2	0	0	0	0	0
29	3	1	2	2	0	0	0	0	0
30	1	1	1	1	0	0	0	0	0
31	0	0	4	1	0	0	0	0	0
32	0	0	1	2	0	0	0	0	0
33	4	1	2	4	0	0	0	0	0
34	0	0	4	3	0	0	0	0	0
35	0	0	2	1	0	0	0	0	0
36	0	0	1	4	0	0	0	0	0
37	3	1	2	1	0	0	0	0	0
38	2	1	1	4	0	0	0	0	0
39	3	1	2	1	0	0	0	0	0
40	0	0	4	3	0	0	0	0	0
41	0	0	4	4	0	0	0	0	0
42	0	0	3	1	0	0	0	0	0
43	6	1	3	4	0	0	0	0	0
44	0	0	2	2	0	0	0	0	0
45	0	0	4	1	0	0	0	0	0
46	0	0	2	2	0	0	0	0	0
47	0	0	4	3	0	0	0	0	0
48	0	0	1	3	0	0	0	0	0
49	1	1	4	1	0	0	0	0	0
50	2	1	3	4	0	0	0	0	0
51	1	1	1	3	0	0	0	0	0
52	0	0	1	2	0	0	0	0	0
53	2	1	4	2	0	0	0	0	0
54	4	1	2	1	0	0	0	0	0
55	0	0	3	1	0	0	0	0	0
56	9	1	1	2	0	0	0	0	0
57	1	1	3	2	0	0	0	0	0
58	0	0	4	2	0	0	0	0	0
59									
60									

1									
2									
3	1	1	3	2	0	0	0	0	0
4	1	1	1	2	0	0	0	0	0
5	0	0	2	1	0	0	0	0	0
6	0	0	2	1	0	0	0	0	0
7	1	1	1	1	0	0	0	0	0
8	0	0	4	1	0	0	0	0	0
9	0	0	3	4	0	0	0	0	0
10	0	0	2	3	0	0	0	0	0
11	2	1	1	2	0	0	0	0	0
12	1	1	1	2	0	0	0	0	0
13	4	1	2	1	0	0	0	0	0
14	1	1	2	3	0	0	0	0	0
15	0	0	2	2	0	0	0	0	0
16	0	0	3	4	0	0	0	0	0
17	2	1	1	2	0	0	0	0	0
18	0	0	3	2	0	0	0	0	0
19	0	0	1	1	0	0	0	0	0
20	1	1	2	3	0	0	0	0	0
21	0	0	3	2	0	0	0	0	0
22	0	0	2	2	0	0	0	0	0
23	0	0	2	2	0	0	0	0	0
24	6	1	3	4	0	0	0	0	0
25	4	1	4	1	0	0	0	0	0
26	2	1	4	4	0	0	0	0	0
27	0	0	2	1	0	0	0	0	0
28	0	0	1	2	0	0	0	0	0
29	1	1	4	1	0	0	0	0	0
30	0	0	1	3	0	0	0	0	0
31	0	0	4	2	0	0	0	0	0
32	1	1	1	1	0	0	0	0	0
33	1	1	1	3	0	0	0	0	0
34	0	0	4	1	0	0	0	0	0
35	0	0	2	3	0	0	0	0	0
36	0	0	3	1	0	0	0	0	0
37	0	0	3	2	0	0	0	0	0
38	1	1	4	3	0	0	0	0	0
39	1	1	2	1	0	0	0	0	0
40	1	1	1	1	0	0	0	0	0
41	0	0	2	2	0	0	0	0	0
42	1	1	3	4	0	0	0	0	0
43	0	0	3	4	0	0	0	0	0
44	2	1	1	3	0	0	0	0	0
45	0	0	1	1	0	0	0	0	0
46	0	0	4	1	0	0	0	0	0
47	1	1	4	2	0	0	0	0	0
48	0	0	3	2	0	0	0	0	0
49	1	1	1	1	0	0	0	0	0
50	0	0	4	1	0	0	0	0	0
51	2	1	1	2	0	0	0	0	0
52	0	0	2	2	0	0	0	0	0
53	0	0	1	2	0	0	0	0	0
54	1	1	4	2	0	0	0	0	0
55	0	0	4	3	0	0	0	0	0
56	1	1	4	1	0	0	0	0	0
57	2	1	3	2	0	0	0	0	0
58	0	0	3	2	0	0	0	0	0
59	0	0	1	2	0	0	0	0	0
60	0	0	1	2	0	0	0	0	0

1									
2									
3	0	0	4	4	0	0	0	0	0
4	1	1	2	2	0	1	0	0	0
5	1	1	3	1	0	0	0	0	0
6	0	0	2	4	0	0	0	0	0
7	2	1	3	4	0	0	0	0	0
8	1	1	4	1	0	0	0	0	0
9	0	0	2	1	0	0	0	0	0
10	2	1	1	3	0	0	0	0	0
11	1	1	2	1	0	0	0	0	0
12	1	1	4	4	0	0	0	0	0
13	1	1	3	4	0	0	0	0	0
14	1	1	1	4	0	0	0	0	0
15	2	1	1	2	0	0	0	0	0
16	1	1	3	2	0	0	0	0	0
17	9	1	1	4	0	0	0	0	0
18	1	1	2	4	0	0	0	0	0
19	1	1	4	4	0	0	0	0	0
20	0	0	4	1	0	0	0	0	0
21	0	0	4	1	0	0	0	0	0
22	0	0	1	1	0	0	0	0	0
23	0	0	1	1	0	0	0	0	0
24	0	0	2	4	0	0	0	0	0
25	0	0	3	1	0	0	0	0	0
26	1	1	4	1	0	0	0	0	0
27	0	0	1	2	0	0	0	0	0
28	1	1	1	4	0	0	0	0	0
29	0	0	2	2	0	0	0	0	0
30	0	0	2	1	0	0	0	0	0
31	0	0	3	4	0	0	0	0	0
32	2	1	1	2	0	0	0	0	0
33	0	0	4	2	0	0	0	0	0
34	0	0	4	2	0	0	0	0	0
35	2	1	1	1	0	0	0	0	0
36	1	1	3	2	0	0	0	0	0
37	0	0	4	1	0	0	0	0	0
38	1	1	1	2	0	0	0	0	0
39	0	0	2	1	0	0	0	0	0
40	0	0	2	4	0	0	0	0	0
41	3	1	2	4	0	0	0	0	0
42	2	1	1	3	0	0	0	0	0
43	0	0	2	1	0	0	0	0	0
44	1	1	1	1	0	0	0	0	0
45	0	0	3	3	0	0	0	0	0
46	2	1	3	2	0	0	0	0	0
47	1	1	4	1	0	0	0	0	0
48	0	0	1	4	0	0	0	0	0
49	0	0	3	2	0	0	0	0	0
50	0	0	4	1	0	0	0	0	0
51	0	0	1	2	0	0	0	0	0
52	1	1	2	1	0	0	0	0	0
53	2	1	2	2	0	0	0	0	0
54	0	0	4	1	0	0	0	0	0
55	0	0	4	1	0	0	0	0	0
56	1	1	3	4	0	0	0	0	0
57	2	1	1	1	0	0	0	0	0
58	0	0	1	2	0	0	0	0	0
59	1	1	1	1	0	0	0	0	0
60	1	1	1	1	0	0	0	0	0

1									
2									
3	2	1	4	1	0	0	0	0	0
4	1	1	1	1	0	0	0	0	0
5	0	0	1	2	0	0	0	0	0
6	0	0	3	4	0	0	0	0	0
7	0	0	3	2	0	0	0	0	0
8	3	1	3	4	0	0	0	0	0
9	0	0	3	2	0	0	0	0	0
10	1	1	2	2	0	0	0	0	0
11	0	0	3	2	0	0	0	0	0
12	1	1	2	2	0	0	0	0	0
13	4	1	1	4	0	0	0	0	0
14	0	0	1	1	0	0	0	0	0
15	0	0	2	1	0	0	0	0	0
16	2	1	1	1	0	0	0	0	0
17	0	0	2	1	0	0	0	0	0
18	2	1	1	1	0	0	0	0	0
19	1	1	1	4	0	0	0	0	0
20	0	0	2	2	0	0	0	0	0
21	3	1	3	4	0	0	0	0	0
22	0	0	1	2	0	0	0	0	0
23	0	0	4	2	0	0	0	0	0
24	2	1	2	2	0	0	0	0	0
25	0	0	4	1	0	0	0	0	0
26	1	1	3	3	0	0	0	0	0
27	1	1	1	3	0	0	0	0	0
28	2	1	3	4	0	0	0	0	0
29	0	0	3	1	0	0	0	0	0
30	0	0	1	2	0	0	0	0	0
31	1	1	1	4	0	0	0	0	0
32	0	0	2	2	0	0	0	0	0
33	1	1	1	4	0	0	0	0	0
34	1	1	3	4	0	0	0	0	0
35	0	0	3	4	0	0	0	0	0
36	1	1	3	4	0	0	0	0	0
37	0	0	4	1	0	0	0	0	0
38	0	0	2	2	0	0	0	0	0
39	0	0	4	1	0	0	0	0	0
40	2	1	1	2	0	0	0	0	0
41	4	1	1	3	0	0	0	0	0
42	0	0	3	1	0	0	0	0	0
43	0	0	1	3	0	0	0	0	0
44	0	0	4	4	0	0	0	0	0
45	0	0	1	1	0	0	0	0	0
46	0	0	4	2	0	0	0	0	0
47	0	0	4	3	0	0	0	0	0
48	0	0	3	2	0	0	0	0	0
49	0	0	1	1	0	0	0	0	0
50	0	0	3	2	0	0	0	0	0
51	0	0	3	2	0	0	0	0	0
52	1	1	2	1	0	0	0	0	0
53	1	1	2	1	0	0	0	0	0
54	0	0	1	3	0	0	0	0	0
55	0	0	3	2	0	0	0	0	0
56	3	1	3	3	0	0	0	0	0
57	0	0	4	1	0	0	0	0	0
58	6	1	1	1	0	0	0	0	0
59	0	0	2	1	0	0	0	0	0
60									

1									
2									
3	0	0	1	2	0	0	0	0	0
4	0	0	4	2	0	0	0	0	0
5	1	1	1	2	0	0	0	0	0
6	0	0	2	1	0	0	0	0	0
7	0	0	2	3	0	0	0	0	0
8	0	0	3	2	0	0	0	0	0
9	0	0	3	4	0	0	0	0	0
10	0	0	4	1	0	0	0	0	0
11	0	0	1	2	0	0	0	0	0
12	0	0	1	1	0	0	0	0	0
13	2	1	4	2	0	0	0	0	0
14	1	1	3	4	0	0	0	0	0
15	0	0	3	3	0	0	0	0	0
16	2	1	1	2	0	0	0	0	0
17	1	1	3	1	0	0	0	0	0
18	0	0	3	4	0	0	0	0	0
19	0	0	2	2	0	0	0	0	0
20	0	0	3	4	0	0	0	0	0
21	0	0	1	1	0	0	0	0	0
22	1	1	1	4	0	0	0	0	0
23	0	0	1	1	0	0	0	0	0
24	1	1	1	2	0	0	0	0	0
25	2	1	3	2	0	0	0	0	0
26	0	0	4	3	0	0	0	0	0
27	0	0	4	1	0	0	0	0	0
28	1	1	2	1	0	0	0	0	0
29	1	1	4	2	0	0	0	0	0
30	1	1	1	1	0	0	0	0	0
31	0	0	3	4	0	0	0	0	0
32	5	1	1	3	0	0	0	0	0
33	3	1	1	1	0	0	0	0	0
34	1	1	1	1	0	0	0	0	0
35	1	1	4	1	0	0	0	0	0
36	0	0	1	1	0	1	1	0	0
37	1	1	2	1	0	0	0	0	0
38	0	0	3	4	0	0	0	0	0
39	0	0	3	4	0	0	0	0	0
40	0	0	1	1	0	0	0	0	0
41	0	0	1	2	0	0	0	0	0
42	0	0	4	2	0	0	0	0	0
43	0	0	1	4	0	0	0	0	0
44	1	1	4	4	0	0	0	0	0
45	0	0	4	2	0	0	0	0	0
46	0	0	3	4	0	0	0	0	0
47	1	1	1	2	0	0	0	0	0
48	0	0	3	4	0	0	0	0	0
49	0	0	4	2	0	0	0	0	0
50	1	1	3	2	0	0	0	0	0
51	1	1	4	2	0	0	0	0	0
52	2	1	4	2	0	0	0	0	0
53	0	0	4	1	0	0	0	0	0
54	1	1	4	1	0	0	0	0	0
55	0	0	2	1	0	0	0	0	0
56	1	1	2	2	0	0	0	0	0
57	1	1	4	1	0	0	0	0	0
58	3	1	1	1	0	0	0	0	0



1									
2									
3	1	1	1	2	0	0	0	0	0
4	7	1	1	1	0	0	0	0	0
5	1	1	3	1	0	0	0	0	0
6	0	0	2	2	0	0	0	0	0
7	0	0	4	3	0	0	0	0	0
8	3	1	2	3	0	0	0	0	0
9	3	1	1	3	0	0	0	0	0
10	2	1	3	4	0	0	0	0	0
11	2	1	3	4	0	0	0	0	0
12	1	1	3	4	0	0	0	0	0
13	1	1	1	3	0	0	0	0	0
14	1	1	3	4	0	0	0	0	0
15	0	0	2	4	0	0	0	0	0
16	0	0	3	3	0	0	0	0	0
17	2	1	3	4	0	0	0	0	0
18	2	1	2	2	0	0	0	0	0
19	0	0	3	1	0	0	0	0	0
20	0	0	2	2	0	0	0	0	0
21	0	0	4	2	0	0	0	0	0
22	0	0	1	2	0	0	0	0	0
23	0	0	1	2	0	0	0	0	0
24	1	1	4	1	0	0	0	0	0
25	1	1	2	2	0	0	0	0	0
26	0	0	4	3	0	0	0	0	0
27	0	0	4	3	0	0	0	0	0
28	1	1	3	2	0	0	0	0	0
29	1	1	1	1	0	0	0	0	0
30	0	0	4	3	0	0	0	0	0
31	1	1	4	2	0	0	0	0	0
32	0	0	4	1	0	0	0	0	0
33	1	1	3	3	0	0	0	0	0
34	0	0	4	2	0	0	0	0	0
35	1	1	3	3	0	0	0	0	0
36	0	0	3	4	0	0	0	0	0
37	1	1	3	2	0	0	0	0	0
38	0	0	1	1	0	0	0	0	0
39	0	0	4	2	0	0	0	0	0
40	2	1	3	1	0	0	0	0	0
41	3	1	4	2	0	0	0	0	0
42	0	0	4	2	0	0	0	0	0
43	2	1	2	2	0	0	0	0	0
44	1	1	3	4	0	0	0	0	0
45	4	1	3	4	0	0	0	0	0
46	0	0	1	1	0	0	0	0	0
47	0	0	1	4	0	0	0	0	0
48	2	1	2	2	0	0	0	0	0
49	0	0	3	2	0	0	0	0	0
50	0	0	4	2	0	0	0	0	0
51	3	1	2	4	0	0	0	0	0
52	1	1	4	4	0	0	0	0	0
53	4	1	4	1	0	0	0	0	0
54	2	1	4	2	0	0	0	0	0
55	0	0	3	1	0	0	0	0	0
56	1	1	4	2	0	0	0	0	0
57	0	0	1	4	0	0	0	0	0
58	4	1	3	3	0	0	0	0	0

1									
2									
3	0	0	4	2	0	0	0	0	0
4	0	0	1	3	0	0	0	0	0
5	1	1	2	4	0	0	0	0	0
6	0	0	4	3	0	0	0	0	0
7	0	0	2	4	0	0	0	0	0
8	1	1	3	1	0	0	0	0	0
9	0	0	3	1	0	0	0	0	0
10	1	1	3	1	0	0	0	0	0
11	1	1	2	2	0	0	0	0	0
12	2	1	1	2	0	0	0	0	0
13	1	1	3	4	0	0	0	0	0
14	0	0	1	1	0	0	0	0	0
15	0	0	2	1	0	0	0	0	0
16	0	0	2	3	0	0	0	0	0
17	1	1	1	2	0	0	0	0	0
18	1	1	2	1	0	0	0	0	0
19	0	0	1	1	0	0	0	0	0
20	1	1	4	1	0	0	0	0	0
21	0	0	2	1	0	0	0	0	0
22	2	1	1	2	0	0	0	0	0
23	3	1	1	2	0	0	0	0	0
24	0	0	2	2	0	0	0	0	0
25	1	1	2	3	0	0	0	0	0
26	0	0	3	2	0	0	0	0	0
27	2	1	3	4	0	0	0	0	0
28	0	0	2	1	0	0	0	0	0
29	4	1	1	4	0	0	0	0	0
30	1	1	4	3	0	0	0	0	0
31	0	0	3	2	0	0	0	0	0
32	0	0	3	2	0	0	0	0	0
33	0	0	2	1	0	0	0	0	0
34	1	1	3	3	0	0	0	0	0
35	1	1	4	1	0	0	0	0	0
36	0	0	4	1	0	0	0	0	0
37	0	0	3	3	0	0	0	0	0
38	2	1	1	2	0	0	0	0	0
39	1	1	2	3	0	0	0	0	0
40	2	1	2	2	0	0	0	0	0
41	2	1	1	4	0	0	0	0	0
42	0	0	3	4	0	0	0	0	0
43	1	1	3	2	0	0	0	0	0
44	1	1	1	3	0	0	0	0	0
45	1	1	2	1	0	0	0	0	0
46	1	1	4	2	0	0	0	0	0
47	0	0	4	2	0	0	0	0	0
48	9	1	4	2	0	0	0	0	0
49	0	0	1	1	0	0	0	0	0
50	2	1	4	2	0	0	0	0	0
51	0	0	4	1	0	0	0	0	0
52	0	0	3	4	0	0	0	0	0
53	0	0	4	2	0	0	0	0	0
54	6	1	3	3	0	0	0	0	0
55	1	1	1	4	0	0	0	0	0
56	1	1	4	2	0	0	0	0	0
57	0	0	2	2	0	0	0	0	0
58	9	1	2	2	0	0	0	0	0
59									
60									

1									
2									
3	2	1	2	1	0	0	0	0	0
4	1	1	2	1	0	0	0	0	0
5	2	1	3	1	0	0	0	0	0
6	0	0	4	1	0	0	0	0	0
7	0	0	1	1	0	0	0	0	0
8	3	1	1	2	0	0	0	0	0
9	1	1	4	1	0	0	0	0	0
10	1	1	1	2	0	1	0	0	0
11	2	1	3	4	0	0	0	0	0
12	2	1	3	2	1	0	0	0	0
13	0	0	1	2	0	0	0	0	0
14	1	1	1	4	0	0	0	0	0
15	1	1	4	3	0	0	0	0	0
16	0	0	4	1	0	0	0	0	0
17	0	0	1	2	0	0	0	0	0
18	2	1	4	2	0	0	0	0	0
19	0	0	3	2	0	0	0	0	0
20	0	0	2	1	0	0	0	0	0
21	0	0	2	1	0	0	0	0	0
22	3	1	3	4	0	0	0	0	0
23	0	0	1	1	0	0	0	0	0
24	0	0	3	3	0	0	0	0	0
25	1	1	2	4	0	0	0	0	0
26	1	1	2	1	0	0	0	0	0
27	2	1	4	4	0	0	0	0	0
28	1	1	1	2	0	0	0	0	0
29	0	0	1	1	0	0	0	0	0
30	0	0	3	4	0	0	0	0	0
31	0	0	3	1	0	0	0	0	0
32	0	0	3	4	0	0	0	0	0
33	3	1	2	1	0	0	0	0	0
34	1	1	2	2	0	0	0	0	0
35	1	1	4	3	0	0	0	0	0
36	0	0	2	3	0	0	0	0	0
37	1	1	1	2	0	0	0	0	0
38	0	0	3	2	0	0	0	0	0
39	1	1	1	4	0	0	0	0	0
40	1	1	1	2	0	0	0	0	0
41	1	1	4	1	0	0	0	0	0
42	0	0	3	4	0	0	0	0	0
43	0	0	3	4	0	0	0	0	0
44	0	0	3	4	0	0	0	0	0
45	0	0	4	2	0	0	0	0	0
46	0	0	1	2	0	0	0	0	0
47	0	0	4	2	0	0	0	0	0
48	4	1	3	4	0	0	0	0	0
49	0	0	4	1	0	0	0	0	0
50	0	0	4	1	0	0	0	0	0
51	0	0	2	1	0	0	0	0	0
52	1	1	3	2	0	0	0	0	0
53	2	1	1	2	0	0	0	0	0
54	0	0	4	2	0	0	0	0	0
55	2	1	3	4	0	0	0	0	0
56	2	1	3	4	0	0	0	0	0
57	5	1	2	3	0	0	0	0	0
58	1	1	2	4	0	0	0	0	0
59	1	1	2	1	0	0	0	0	0
60	2	1	2	1	0	0	0	0	0

1									
2									
3	0	0	4	2	0	0	0	0	0
4	2	1	4	3	0	0	0	0	0
5	4	1	1	1	0	0	0	0	0
6	0	0	4	2	0	0	0	0	0
7	1	1	2	2	0	0	0	0	0
8	1	1	2	1	0	0	0	0	0
9	4	1	1	1	0	0	0	0	0
10	3	1	3	4	0	0	0	0	0
11	1	1	2	2	0	0	0	0	0
12	1	1	4	1	0	0	0	0	0
13	2	1	3	4	0	0	0	0	0
14	0	0	4	2	0	0	0	0	0
15	1	1	4	1	0	0	0	0	0
16	0	0	4	1	0	0	0	0	0
17	1	1	3	4	0	0	0	0	0
18	0	0	1	2	0	0	0	0	0
19	0	0	2	2	0	0	0	0	0
20	0	0	3	1	0	0	0	0	0
21	1	1	3	1	0	0	0	0	0
22	0	0	2	4	0	0	0	0	0
23	0	0	2	3	0	0	0	0	0
24	0	0	1	1	0	0	0	0	0
25	0	0	4	2	0	0	0	0	0
26	0	0	4	4	0	0	0	0	0
27	0	0	1	1	0	0	0	0	0
28	1	1	2	2	0	0	0	0	0
29	11	1	1	1	0	0	0	0	0
30	0	0	4	1	0	0	0	0	0
31	0	0	3	3	0	0	0	0	0
32	0	0	4	2	0	0	0	0	0
33	0	0	4	2	0	0	0	0	0
34	1	1	2	2	0	0	0	0	0
35	0	0	1	2	0	0	0	0	0
36	0	0	4	4	0	0	0	0	0
37	0	0	4	4	0	0	0	0	0
38	3	1	2	2	0	0	0	0	0
39	0	0	3	3	0	0	0	0	0
40	0	0	1	1	0	0	0	0	0
41	0	0	1	2	0	0	0	0	0
42	0	0	1	2	0	0	0	0	0
43	2	1	3	4	0	0	0	0	0
44	0	0	1	2	0	0	0	0	0
45	0	0	2	1	0	0	0	0	0
46	0	0	1	2	0	0	0	0	0
47	0	0	1	2	0	0	0	0	0
48	0	0	4	1	0	0	0	0	0
49	0	0	4	2	0	0	0	0	0
50	0	0	3	4	0	0	0	0	0
51	0	0	1	2	0	0	0	0	0
52	0	0	3	4	0	0	0	0	0
53	1	1	1	2	0	0	0	0	0
54	2	1	2	2	0	0	0	0	0
55	0	0	4	1	0	0	0	0	0
56	0	0	3	4	0	0	0	0	0
57	0	0	4	2	0	0	0	0	0
58	2	1	3	4	0	0	0	0	0
59	2	1	1	4	1	0	0	0	0
60	2	1	1	4	1	0	0	0	0

1									
2									
3	0	0	3	3	0	0	0	0	0
4	0	0	2	1	0	0	0	0	0
5	5	1	1	1	0	0	0	0	0
6	0	0	1	1	0	0	0	0	0
7	1	1	2	4	0	0	0	0	0
8	1	1	4	3	0	0	0	0	0
9	4	1	2	1	0	0	0	0	0
10	1	1	2	4	0	0	0	0	0
11	1	1	3	1	0	0	0	0	0
12	0	0	4	4	0	0	0	0	0
13	1	1	3	1	0	0	0	0	0
14	3	1	1	3	0	0	0	0	0
15	1	1	4	4	0	0	0	0	0
16	1	1	1	2	0	0	0	0	0
17	0	0	3	4	0	0	0	0	0
18	0	0	1	2	0	0	0	0	0
19	1	1	1	2	0	0	0	0	0
20	2	1	3	4	0	0	0	0	0
21	1	1	4	2	0	0	0	0	0
22	1	1	1	1	0	0	0	0	0
23	0	0	3	4	0	0	0	0	0
24	1	1	4	1	0	0	0	0	0
25	1	1	4	4	0	0	0	0	0
26	1	1	4	4	0	0	0	0	0
27	2	1	4	2	0	0	0	0	0
28	1	1	1	1	0	0	0	0	0
29	0	0	2	2	0	0	0	0	0
30	5	1	4	1	0	0	0	0	0
31	0	0	4	3	0	0	0	0	0
32	0	0	3	2	0	0	0	0	0
33	3	1	1	2	0	0	0	0	0
34	1	1	1	3	0	0	0	0	0
35	2	1	1	3	0	0	0	0	0
36	0	0	1	4	0	0	0	0	0
37	6	1	1	1	0	0	0	0	0
38	0	0	1	2	0	0	0	0	0
39	2	1	3	3	0	0	0	0	0
40	0	0	4	2	0	0	0	0	0
41	0	0	4	1	0	0	0	0	0
42	1	1	3	4	0	0	0	0	0
43	1	1	2	1	0	0	0	0	0
44	2	1	1	1	0	0	0	0	0
45	0	0	3	1	0	0	0	0	0
46	2	1	1	1	0	0	0	0	0
47	2	1	1	3	0	0	0	0	0
48	0	0	4	2	0	0	0	0	0
49	0	0	4	3	0	0	0	0	0
50	1	1	1	2	0	0	0	0	0
51	1	1	1	2	0	0	0	0	0
52	5	1	3	4	0	0	0	0	0
53	0	0	4	1	0	0	0	0	0
54	0	0	3	3	0	0	0	0	0
55	1	1	2	3	0	0	0	0	0
56	1	1	4	4	0	0	0	0	0
57	1	1	3	2	0	0	0	0	0
58	0	0	3	1	0	0	0	0	0
59	0	0	3	4	0	0	0	0	0
60	0	0	3	4	0	0	0	0	0

1									
2									
3	0	0	1	1	0	0	0	0	0
4	0	0	2	3	0	0	0	0	0
5	2	1	4	4	0	0	0	0	0
6	2	1	4	1	0	0	0	0	0
7	11	1	4	3	0	0	0	0	1
8	2	1	1	2	0	0	0	0	0
9									

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

For peer review only

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

	Methotrexate	Sulfasalazine	Leflunomid	Hydroxychloroquine	Cyclosporin	Azathioprine	Cyclophosphamide	TNF	Steroid, mg
4	0	0	0	1	0	1	0	0	2.21
5	0	0	0	0	0	0	0	0	0.00
6	0	0	0	1	0	0	0	0	5.22
7	0	0	0	1	0	0	1	0	9.97
8	0	0	0	0	0	1	0	0	7.29
9	0	0	0	1	0	0	1	0	70.51
10	0	0	0	0	0	1	0	0	25.19
11	0	0	0	1	0	1	0	0	2.44
12	0	0	0	1	0	0	0	0	0.00
13	0	0	0	0	0	0	0	0	2.34
14	0	0	0	0	0	0	0	0	0.00
15	0	0	0	0	0	0	0	0	0.00
16	0	0	0	0	0	0	0	0	1.15
17	0	0	0	0	0	0	0	0	2.30
18	0	0	0	1	0	1	0	0	11.51
19	0	0	0	1	0	0	0	0	6.71
20	0	0	0	0	0	0	0	0	3.07
21	0	0	0	1	0	0	0	0	1.86
22	1	0	1	0	0	0	0	0	2.03
23	0	0	0	0	0	0	0	0	2.49
24	0	0	0	1	0	1	0	0	9.51
25	0	0	0	1	0	1	0	0	5.30
26	0	0	0	0	0	0	0	0	0.12
27	0	0	0	0	0	1	0	0	3.16
28	0	0	0	1	0	1	0	0	4.22
29	0	0	0	0	0	0	0	0	6.01
30	0	0	0	1	0	0	0	0	6.48
31	0	0	0	0	0	0	0	0	0.00
32	0	0	0	0	0	0	0	0	0.37
33	0	0	0	1	0	0	1	0	2.33
34	0	0	0	1	0	0	0	0	3.07
35	0	0	0	1	0	0	0	0	0.38
36	0	0	0	1	0	1	0	0	9.10
37	0	0	0	0	0	0	0	0	1.77
38	0	1	0	1	0	0	1	0	6.47
39	0	0	0	0	0	0	0	0	0.00
40	0	0	0	0	0	0	0	0	0.00
41	0	0	0	0	0	0	0	0	6.04
42	0	0	0	1	0	0	0	0	4.60
43	1	0	0	1	0	0	0	0	3.10
44	0	0	0	1	0	1	0	0	5.78
45	0	0	0	1	0	0	0	0	6.26
46	0	0	0	0	0	0	0	0	0.30
47	0	0	0	0	0	1	0	0	1.92
48	0	0	0	0	0	0	0	0	0.00
49	0	0	0	1	0	0	0	0	4.60
50	0	0	0	1	0	0	0	0	0.00
51	0	0	0	1	0	0	0	0	1.81
52	0	0	0	1	0	0	0	0	12.44
53	0	0	0	1	0	0	0	0	0.00
54	0	0	0	0	0	0	0	0	4.33
55	0	0	0	0	0	0	0	0	4.99
56	0	0	0	0	0	1	0	0	20.00
57	0	0	0	1	0	0	0	0	0.00
58	0	0	0	1	0	1	0	0	5.56

1									
2									
3	0	0	0	0	0	0	0	0	0.00
4	0	0	0	1	0	0	0	0	5.07
5	0	0	0	1	0	1	0	0	6.99
6	0	0	0	1	0	0	0	0	0.00
7	0	0	0	1	0	0	0	0	4.89
8	0	1	0	1	0	0	0	0	3.84
9	0	0	0	1	0	0	0	0	1.12
10	0	0	0	1	0	0	0	0	2.86
11	0	0	0	1	0	1	0	0	0.60
12	0	0	0	1	0	0	0	0	0.00
13	0	0	0	1	0	1	0	0	0.21
14	0	0	0	0	0	0	0	0	4.99
15	0	0	0	1	0	0	0	0	1.14
16	0	0	0	1	0	0	0	0	3.07
17	0	0	0	0	0	0	0	0	0.55
18	0	0	0	1	1	0	0	0	4.53
19	0	0	0	1	1	1	0	0	9.21
20	0	0	0	1	0	0	0	0	17.36
21	0	0	0	1	0	0	0	0	0.00
22	0	0	0	1	0	0	0	0	3.79
23	0	0	0	1	0	0	0	0	3.45
24	1	0	0	1	0	0	1	0	2.25
25	0	0	0	0	0	0	0	0	4.23
26	0	0	0	1	0	0	0	0	2.59
27	0	1	0	1	0	0	0	0	2.77
28	0	0	0	1	0	1	0	0	1.21
29	0	0	0	1	0	0	0	0	0.12
30	0	0	0	0	0	0	0	0	0.00
31	0	0	0	0	0	0	0	0	9.78
32	0	0	0	1	0	0	0	0	2.38
33	0	0	0	0	0	0	0	0	17.64
34	0	0	0	0	0	1	1	0	18.27
35	0	0	0	0	1	0	0	0	6.68
36	0	0	0	1	0	0	0	0	5.96
37	0	0	0	1	0	0	0	0	6.22
38	0	0	0	0	0	0	0	0	0.00
39	0	0	0	0	0	0	0	0	0.38
40	0	0	0	1	0	0	0	0	8.44
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	0	0	0	0	0	5.75
43	0	0	0	1	0	1	0	0	3.93
44	0	0	0	1	0	1	0	0	1.79
45	0	0	0	1	0	0	0	0	3.26
46	0	0	0	1	0	1	0	0	0.00
47	0	0	0	0	0	0	0	0	3.07
48	0	0	0	1	0	0	0	0	10.27
49	0	0	0	1	0	0	0	0	4.93
50	0	0	0	0	0	0	0	0	1.53
51	0	0	0	1	0	0	0	0	0.00
52	0	0	0	1	0	0	0	0	7.36
53	0	0	0	1	0	1	0	0	5.62
54	0	0	0	1	0	1	0	0	0.00
55	0	0	0	1	0	1	0	0	4.92
56	0	0	0	1	0	1	0	0	0.16
57	0	0	0	0	0	0	0	0	5.08
58	0	0	0	0	0	0	0	0	6.99
59	0	0	0	0	0	0	0	0	
60	0	0	0	0	0	0	0	0	



1									
2									
3	0	0	0	1	0	0	0	0	8.30
4	0	0	0	1	1	0	0	0	0.89
5	0	1	0	1	0	1	0	0	14.96
6	0	0	0	1	0	0	0	0	4.14
7	0	0	0	0	0	0	0	0	6.99
8	0	0	0	1	0	0	0	0	6.89
9	0	0	0	0	0	0	0	0	0.00
10	0	0	0	1	0	1	0	0	3.92
11	0	0	0	0	0	0	0	0	5.03
12	0	0	0	1	0	0	0	0	0.86
13	0	0	0	1	0	0	0	0	0.00
14	0	0	0	0	0	0	0	0	0.00
15	1	0	0	1	0	1	0	0	1.48
16	0	0	0	1	0	0	0	0	2.84
17	0	0	0	0	0	1	0	0	2.30
18	0	0	0	0	0	0	0	0	0.00
19	0	0	0	1	0	1	0	0	7.34
20	1	0	0	1	0	1	0	0	9.21
21	0	0	0	1	0	1	0	0	3.15
22	0	0	0	0	0	0	0	0	4.93
23	0	0	0	1	0	1	0	0	9.56
24	0	0	0	1	0	0	0	0	4.30
25	0	0	0	1	0	0	0	0	4.40
26	0	0	0	1	0	0	0	0	7.40
27	0	0	0	1	0	0	0	0	0.85
28	1	0	0	1	0	1	0	0	15.03
29	0	0	0	1	0	1	0	0	19.87
30	0	0	0	0	0	0	0	0	4.09
31	0	0	0	1	0	0	0	0	6.42
32	0	0	0	1	0	0	0	0	5.75
33	0	0	0	1	0	0	0	0	3.45
34	0	0	0	1	0	1	0	0	1.23
35	0	0	0	1	0	0	0	0	0.00
36	0	0	0	1	0	1	0	0	2.68
37	0	0	0	0	0	0	0	0	0.93
38	0	0	0	1	0	0	0	0	0.00
39	0	0	0	1	0	1	0	0	4.60
40	1	1	0	1	0	0	0	0	4.99
41	0	0	0	1	0	0	0	0	6.27
42	0	0	0	0	0	0	1	0	16.59
43	0	0	0	1	0	0	0	0	6.11
44	0	0	0	1	0	0	0	0	4.22
45	0	0	0	1	0	1	1	0	9.44
46	0	0	0	1	0	0	0	0	6.58
47	0	0	0	1	0	1	0	0	4.60
48	1	0	0	1	0	0	1	0	8.97
49	0	0	0	1	0	0	0	0	4.63
50	0	0	0	1	0	0	0	0	3.84
51	0	0	0	0	0	1	0	0	14.36
52	0	0	0	1	0	0	0	0	0.77
53	0	0	0	1	0	1	0	0	1.93
54	1	0	0	1	0	1	0	0	28.14
55	0	0	0	0	0	1	0	0	11.64
56	0	0	0	1	0	0	0	0	12.22
57	0	0	0	0	0	0	0	0	0.00
58	0	0	0	0	0	0	0	0	0.00
59	0	0	0	0	0	0	0	0	0.00
60	0	0	0	0	0	0	0	0	0.00

1									
2									
3	0	0	0	1	0	0	1	0	12.86
4	0	0	0	1	0	1	0	0	7.81
5	0	0	1	1	0	0	0	0	0.77
6	0	0	0	1	0	0	0	0	1.15
7	0	0	0	1	0	0	0	0	8.10
8	0	0	0	1	0	0	0	0	2.30
9	0	0	0	1	0	0	0	0	1.63
10	0	0	0	0	0	0	0	0	4.60
11	0	0	0	1	0	0	0	0	0.00
12	0	1	0	1	0	0	0	0	9.29
13	0	0	0	0	0	0	0	0	0.03
14	0	0	0	0	0	0	1	0	6.19
15	0	0	0	1	0	0	0	0	5.16
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	0	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	8.63
19	0	0	0	0	0	0	0	0	0.00
20	0	0	0	1	0	0	0	0	8.58
21	0	0	0	1	0	0	0	0	6.58
22	0	0	0	0	0	0	0	0	2.49
23	0	0	0	1	0	0	0	0	5.96
24	0	0	0	0	0	0	0	0	0.00
25	0	0	0	0	0	1	0	0	7.40
26	0	0	0	1	0	1	0	0	15.67
27	0	0	0	1	1	0	0	0	3.68
28	0	0	0	1	0	0	0	0	0.25
29	0	0	0	1	0	0	1	0	20.40
30	0	0	0	1	0	0	0	0	0.00
31	0	0	0	0	0	0	0	0	0.00
32	0	0	0	0	0	1	0	0	3.70
33	0	0	0	0	0	0	1	0	10.00
34	0	0	0	1	0	0	0	0	3.07
35	0	0	0	0	0	0	0	0	0.77
36	0	0	0	0	0	0	0	0	1.42
37	0	0	0	0	0	0	0	0	0.00
38	0	0	0	0	0	0	0	0	0.00
39	0	0	0	0	0	0	0	0	0.00
40	0	0	0	1	0	0	0	0	4.82
41	0	0	0	1	0	0	0	0	3.53
42	0	1	0	1	0	0	0	0	0.67
43	0	0	0	0	0	0	0	0	3.75
44	0	0	0	1	0	0	0	0	0.00
45	0	0	0	1	0	0	0	0	3.26
46	0	0	0	0	0	0	0	0	0.00
47	0	0	0	1	0	1	0	0	0.00
48	0	0	0	1	0	1	0	0	24.44
49	0	0	0	1	0	1	0	0	4.64
50	0	0	0	0	0	0	1	0	8.59
51	0	0	0	1	0	0	0	0	0.00
52	0	0	0	1	0	0	0	0	0.03
53	0	0	0	1	0	0	0	0	1.58
54	0	0	0	1	0	0	0	0	0.00
55	0	0	0	1	0	1	0	0	4.12
56	0	0	0	1	0	1	0	0	11.29
57	0	0	0	0	0	1	1	0	12.77
58	0	0	0	0	0	0	0	0	4.99
59	0	0	0	0	0	0	0	0	7.97
60	1	0	0	0	0	1	1	0	

1									
2									
3	0	0	0	1	0	1	0	0	0.19
4	0	0	0	0	0	0	0	0	1.05
5	0	0	0	1	0	0	0	0	12.33
6	0	0	0	0	1	0	0	0	7.99
7	0	0	0	0	0	0	0	0	0.13
8	0	0	0	1	0	0	0	0	3.16
9	0	0	0	1	0	0	0	0	2.11
10	0	0	0	1	0	1	0	0	1.53
11	0	0	0	0	0	0	0	0	1.15
12	0	0	0	0	0	0	0	0	0.00
13	0	0	0	1	0	0	0	0	13.97
14	0	0	0	0	0	0	0	0	0.00
15	0	0	0	1	0	1	0	0	2.30
16	0	0	0	0	0	0	0	0	2.49
17	0	0	0	0	0	0	0	0	0.00
18	0	0	0	0	0	1	0	0	4.03
19	0	0	0	1	0	0	0	0	0.25
20	0	0	0	0	0	0	0	0	0.19
21	0	0	0	0	0	0	0	0	0.00
22	0	0	0	1	0	1	0	0	5.37
23	1	0	0	1	0	0	0	0	7.51
24	0	0	0	0	0	0	0	0	1.53
25	0	0	0	1	0	0	0	0	3.84
26	0	0	0	1	0	0	0	0	2.53
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	0	0	1	0	0	0.89
29	0	0	0	0	0	0	0	0	2.01
30	0	0	0	1	0	1	0	0	12.62
31	0	0	0	0	0	0	0	0	0.00
32	0	0	0	1	0	0	0	0	8.85
33	0	0	0	1	0	0	0	0	0.41
34	0	0	0	0	0	1	0	0	11.32
35	0	0	0	0	0	0	0	0	9.21
36	0	0	0	0	0	0	0	0	4.99
37	0	0	0	1	1	1	0	0	2.55
38	0	0	0	0	0	0	0	0	0.00
39	0	0	0	1	0	0	0	0	0.00
40	0	0	0	1	0	1	0	0	17.64
41	0	0	0	0	0	0	0	0	3.84
42	0	0	0	1	0	0	0	0	0.00
43	0	0	0	1	0	1	0	0	0.06
44	0	0	0	1	0	1	0	0	9.96
45	0	0	0	1	1	0	0	0	9.07
46	0	0	0	1	0	0	0	0	0.00
47	0	0	0	1	0	0	0	0	10.36
48	0	0	0	0	0	1	0	0	0.25
49	0	0	0	1	0	0	0	0	8.32
50	0	0	0	0	0	0	1	0	2.37
51	1	0	0	1	0	0	0	0	10.95
52	0	0	0	0	0	0	0	0	0.00
53	0	0	0	1	0	1	0	0	1.03
54	0	0	0	1	0	0	0	0	18.58
55	0	0	0	1	0	0	0	0	0.77
56	0	0	0	1	0	0	0	0	5.14
57	0	0	0	0	0	0	0	0	0.00
58	0	0	0	0	0	0	0	0	0.00
59	0	0	0	1	0	1	0	0	0.72
60									

1									
2									
3	0	0	0	1	0	0	0	0	1.75
4	0	0	0	1	0	0	0	0	7.03
5	0	0	0	0	0	0	0	0	9.45
6	0	1	0	1	0	1	0	0	0.00
7	0	0	0	1	0	1	1	0	32.38
8	0	0	0	1	0	0	0	0	13.33
9	0	0	0	1	0	0	0	0	0.00
10	0	0	0	0	0	0	0	0	9.84
11	0	0	0	1	0	0	0	0	5.37
12	0	0	0	1	0	0	0	0	18.22
13	0	0	0	0	0	0	0	0	0.00
14	0	0	0	0	0	1	0	0	4.99
15	1	0	1	1	0	0	0	0	4.22
16	0	0	0	0	0	0	0	0	14.96
17	0	0	0	1	1	0	0	0	27.85
18	0	0	0	0	0	0	0	0	0.00
19	0	0	0	0	0	0	0	0	0.00
20	0	0	0	1	0	0	0	0	1.38
21	0	0	0	0	0	1	0	0	4.60
22	1	1	1	0	0	1	0	0	0.00
23	0	0	0	1	0	0	0	0	3.07
24	0	0	0	1	0	1	0	0	5.93
25	1	0	0	1	0	0	0	0	4.99
26	0	0	0	1	0	0	0	0	14.41
27	0	0	0	1	0	1	0	0	56.34
28	0	0	0	1	0	1	0	0	0.08
29	0	0	0	1	0	0	0	0	0.06
30	0	0	0	1	0	1	0	0	13.59
31	0	0	0	0	0	1	0	0	4.53
32	0	0	0	1	0	1	0	0	7.63
33	0	0	0	1	0	0	0	0	0.00
34	0	0	0	1	0	1	0	0	5.32
35	0	0	0	0	0	1	1	0	18.89
36	0	0	0	0	0	0	0	0	0.70
37	0	0	0	1	0	0	0	0	5.18
38	0	0	0	1	0	0	0	0	6.33
39	1	1	0	1	1	0	0	0	6.14
40	0	0	0	1	0	0	0	0	0.38
41	0	0	0	1	0	0	0	0	0.00
42	0	0	0	1	0	0	0	0	0.00
43	0	0	0	1	0	1	0	0	3.45
44	0	0	0	0	0	1	0	0	6.14
45	0	0	0	1	0	1	0	0	5.70
46	0	1	0	1	0	1	0	0	3.59
47	0	0	0	1	0	0	0	0	9.60
48	0	0	0	1	0	1	0	0	5.08
49	0	0	0	1	0	1	0	0	2.88
50	0	0	0	1	0	1	0	0	2.36
51	0	0	0	1	0	0	0	0	30.48
52	0	0	0	1	0	0	0	0	0.00
53	0	0	0	0	0	0	0	0	12.71
54	0	1	0	1	0	0	0	0	6.90
55	0	0	0	0	1	0	0	0	4.99
56	0	0	0	0	0	0	0	0	0.00
57	0	0	0	1	0	1	0	0	1.53
58	0	0	0	1	0	0	0	0	2.30
59	0	0	0	1	0	0	0	0	
60	0	0	0	1	0	0	0	0	

1									
2									
3	0	0	0	1	0	0	0	0	2.93
4	0	0	0	1	0	1	0	0	13.55
5	0	0	0	1	0	0	0	0	3.11
6	0	0	0	1	0	0	0	0	5.95
7	0	0	0	0	1	0	0	0	9.79
8	0	0	0	1	1	1	0	0	10.74
9	1	0	0	0	0	0	0	1	0.00
10	0	0	0	0	0	0	0	0	0.00
11	0	0	0	1	0	0	0	0	1.73
12	0	0	0	1	0	1	0	0	10.81
13	0	0	0	1	0	1	0	0	11.90
14	0	0	0	1	0	0	0	0	0.00
15	0	0	0	1	0	0	0	0	4.11
16	0	0	0	0	0	1	1	0	9.42
17	0	0	0	0	0	1	0	0	9.21
18	0	0	0	1	0	0	0	0	1.05
19	0	0	0	1	0	1	0	0	33.36
20	0	1	0	1	0	0	0	0	3.93
21	0	0	0	0	0	1	0	0	0.00
22	0	0	0	1	0	0	0	0	5.14
23	0	0	0	1	1	0	0	0	5.20
24	0	0	0	1	0	0	0	0	0.00
25	0	0	0	1	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.00
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	11.58
29	0	0	0	1	0	1	0	0	10.01
30	0	1	0	1	0	0	0	0	0.08
31	0	0	0	0	0	1	1	0	14.66
32	0	0	0	1	0	1	0	0	2.68
33	0	0	0	1	0	0	0	0	2.49
34	0	0	0	1	0	0	0	0	0.00
35	0	0	0	1	0	0	0	0	0.77
36	0	0	0	1	0	1	0	0	1.92
37	0	0	0	0	0	1	0	0	1.53
38	0	0	0	0	0	0	0	0	2.44
39	0	0	0	1	0	0	0	0	1.05
40	1	0	0	1	0	0	0	0	2.30
41	1	0	1	1	0	0	0	0	0.00
42	0	0	0	0	0	0	0	0	0.14
43	0	0	0	0	0	0	0	0	0.00
44	0	0	0	1	0	0	0	0	7.48
45	0	0	0	1	0	1	0	0	8.91
46	0	0	0	0	0	0	0	0	0.49
47	0	0	0	1	0	0	0	0	2.30
48	0	0	0	1	0	1	0	0	1.44
49	1	1	0	1	0	0	0	0	2.49
50	0	0	0	1	0	1	0	0	2.11
51	0	0	0	0	0	0	0	0	14.96
52	0	0	0	0	0	1	0	0	9.97
53	0	0	0	1	0	0	1	0	4.60
54	0	0	0	0	0	0	1	0	8.44
55	0	0	0	1	0	0	0	0	0.66
56	0	0	0	1	0	1	0	0	4.51
57	0	0	0	1	0	1	0	0	7.78
58	0	0	0	0	1	0	0	0	3.51
59	0	0	0	1	0	0	0	0	3.89
60	0	0	0	1	0	0	0	0	

1									
2									
3	0	0	0	0	0	1	0	0	4.93
4	0	0	0	0	0	1	0	0	2.68
5	0	0	0	1	0	0	0	0	0.38
6	0	0	0	0	0	0	0	0	0.00
7	0	0	0	0	0	1	0	0	10.03
8	0	0	0	1	0	1	0	0	25.52
9	0	0	0	1	0	1	0	0	5.18
10	0	0	0	1	0	0	0	0	0.00
11	0	0	0	0	0	0	0	0	0.00
12	0	0	0	1	0	0	0	0	0.00
13	0	0	0	1	0	1	0	0	8.22
14	0	0	0	1	0	0	0	0	7.55
15	0	0	0	0	0	0	0	0	0.00
16	0	0	0	1	0	0	0	0	0.00
17	0	0	0	1	0	0	0	0	0.99
18	0	0	0	1	0	0	0	0	4.99
19	0	0	0	0	0	0	0	0	0.00
20	0	0	0	0	0	0	0	0	0.00
21	0	0	0	0	0	0	0	0	0.00
22	0	0	0	0	0	1	0	0	7.14
23	1	1	1	1	0	0	0	1	4.99
24	1	0	0	0	0	0	0	0	0.05
25	1	0	0	0	0	0	0	1	4.60
26	1	0	0	0	0	0	0	0	5.11
27	0	0	0	1	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	4.74
29	0	0	0	0	0	0	0	0	0.00
30	0	1	0	0	0	0	0	0	3.77
31	1	0	0	1	0	0	0	0	2.47
32	0	0	0	0	0	0	0	0	0.99
33	1	0	0	1	0	0	0	0	4.60
34	1	0	0	1	0	0	0	0	4.89
35	1	0	0	1	0	0	0	0	0.33
36	1	0	0	1	0	0	0	0	4.37
37	1	1	0	1	0	0	0	0	0.29
38	0	0	0	0	0	0	0	0	0.00
39	0	0	1	1	0	0	0	1	0.00
40	1	1	0	0	0	0	0	0	2.22
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	0	0	0	0	0	0.00
43	1	0	0	1	0	0	0	0	0.00
44	0	0	0	0	0	0	0	0	0.00
45	1	0	0	1	0	0	0	1	5.53
46	0	1	0	1	0	0	0	0	0.44
47	1	0	0	1	0	0	0	1	1.73
48	1	0	0	1	0	0	0	0	3.07
49	1	0	1	1	0	0	0	1	22.63
50	0	0	0	1	0	0	0	0	3.92
51	0	0	0	0	0	0	0	0	0.00
52	1	0	0	1	0	0	0	0	1.15
53	0	0	0	0	0	0	0	0	0.00
54	0	0	0	0	0	0	0	0	1.71
55	1	1	0	1	0	0	0	1	6.14
56	0	0	0	0	0	0	0	0	3.07
57	1	0	0	0	0	0	0	0	7.95
58	0	1	0	1	0	1	0	0	3.89
59	0	0	0	0	0	0	0	0	0.00
60	0	0	0	0	0	0	0	0	0.00

1									
2									
3	1	0	0	0	0	0	0	0	1.56
4	1	0	0	0	0	0	0	0	1.23
5	0	0	0	0	0	0	0	1	0.00
6	0	0	0	0	0	0	0	0	0.00
7	0	1	0	1	0	0	0	0	1.23
8	0	0	0	1	0	0	0	1	3.07
9	0	0	0	0	0	0	0	0	0.00
10	1	1	0	1	1	0	0	0	9.26
11	1	0	0	0	0	0	0	1	6.52
12	0	0	0	1	0	0	0	1	10.78
13	0	1	0	1	0	0	0	0	3.84
14	0	1	0	1	0	0	0	0	2.30
15	0	0	0	0	0	0	0	0	0.00
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	1	0	0	0	0	0.00
18	1	1	0	1	0	0	0	1	0.00
19	1	1	0	1	0	0	0	0	0.41
20	1	0	0	1	0	0	0	0	2.68
21	1	1	0	1	0	0	0	0	1.21
22	1	1	0	0	0	0	0	0	0.00
23	0	0	0	0	0	0	0	0	4.27
24	0	0	1	1	1	0	0	0	5.18
25	0	0	0	0	0	0	0	0	0.00
26	0	0	0	0	0	0	0	0	0.00
27	0	0	0	0	0	0	0	0	0.00
28	1	1	0	1	0	0	0	1	0.00
29	0	0	1	1	0	0	0	0	0.00
30	1	1	1	0	0	0	0	0	8.34
31	1	0	0	0	0	0	0	0	0.03
32	0	1	0	1	0	0	0	0	2.81
33	0	0	0	0	0	0	0	0	0.30
34	0	0	0	0	0	0	0	0	0.00
35	0	0	0	1	0	0	0	0	1.53
36	0	1	0	0	0	0	0	0	2.05
37	1	0	0	1	0	0	0	0	1.71
38	1	0	0	0	0	0	0	1	3.83
39	0	0	0	0	0	0	0	0	0.00
40	1	1	0	1	0	0	0	0	6.48
41	0	1	0	1	0	0	0	0	8.12
42	1	1	1	1	0	0	0	0	4.03
43	1	1	0	1	0	0	0	0	7.44
44	0	0	0	1	0	0	0	0	0.38
45	0	0	0	0	0	0	0	0	0.00
46	0	1	0	1	0	0	0	0	4.22
47	0	0	0	0	0	0	0	0	1.12
48	1	0	0	1	0	0	0	0	0.00
49	0	0	0	0	0	0	0	0	0.22
50	1	1	0	0	0	0	0	0	1.71
51	1	1	0	0	0	0	0	0	8.00
52	0	1	1	1	0	0	0	0	5.04
53	1	1	0	1	0	0	0	0	3.07
54	1	1	1	1	0	0	0	1	12.08
55	1	0	0	1	0	0	0	0	0.08
56	0	1	0	1	0	0	0	0	2.30
57	1	1	0	0	0	0	0	0	0.00
58	0	0	0	0	0	0	0	0	0.06
59	0	0	0	0	0	0	0	0	0.00
60	0	0	0	0	0	0	0	0	0.00

1									
2									
3	1	1	0	1	0	0	0	0	0.38
4	1	1	0	1	0	0	0	1	8.59
5	1	1	0	0	0	0	0	0	3.07
6	0	0	0	0	0	0	0	0	0.33
7	1	1	0	1	0	0	0	0	3.01
8	0	0	0	1	0	0	0	0	0.34
9	1	0	0	1	0	0	0	0	2.49
10	1	1	0	0	0	0	0	0	4.93
11	0	0	0	0	0	0	0	0	0.00
12	1	0	1	0	0	0	0	0	5.27
13	0	0	0	1	0	0	0	0	5.75
14	0	0	0	0	0	0	0	0	0.00
15	0	1	0	0	0	0	0	0	4.99
16	0	1	1	0	0	0	0	0	17.74
17	1	1	0	1	0	0	0	0	4.44
18	0	0	0	0	0	0	0	0	0.00
19	1	0	0	1	0	0	0	0	4.08
20	1	1	0	1	0	0	0	1	3.84
21	0	0	0	0	0	0	0	0	0.00
22	0	0	0	1	0	0	0	0	3.33
23	1	0	0	1	0	0	0	0	0.00
24	0	0	0	0	0	0	0	0	0.77
25	0	0	0	0	0	0	0	0	0.00
26	0	0	0	0	0	0	0	0	0.00
27	0	0	0	1	0	0	0	0	5.74
28	0	0	0	0	0	0	0	0	0.16
29	0	0	0	0	0	0	0	0	0.00
30	1	0	1	0	0	0	0	0	1.15
31	1	1	0	0	0	0	0	0	5.15
32	0	0	1	1	0	0	0	0	6.49
33	0	0	0	0	0	0	0	0	0.00
34	0	0	0	1	0	0	0	0	2.70
35	1	1	0	1	0	0	0	1	0.00
36	1	0	0	1	0	0	0	0	4.01
37	1	1	0	1	0	0	0	0	7.41
38	1	1	1	1	0	0	0	0	11.33
39	1	1	1	1	1	0	0	0	3.36
40	0	0	0	0	0	0	0	0	0.08
41	0	0	0	0	0	0	0	0	0.09
42	0	0	0	0	0	0	0	0	0.00
43	1	1	1	0	1	0	0	0	1.33
44	0	0	0	0	0	0	0	0	0.00
45	1	0	0	1	0	0	0	0	0.07
46	0	0	0	1	0	0	0	0	0.00
47	1	0	0	1	0	0	0	0	1.92
48	1	1	1	0	1	0	0	1	8.84
49	1	1	0	0	0	0	0	1	0.04
50	0	0	0	0	0	0	0	0	2.45
51	0	0	0	1	0	0	0	0	2.49
52	1	1	0	0	0	0	0	0	2.68
53	0	0	0	1	0	0	0	0	6.34
54	0	0	0	0	0	0	0	0	0.00
55	0	1	0	1	0	0	0	0	12.27
56	0	1	0	0	0	0	0	0	0.96
57	0	0	0	1	0	1	0	0	7.23
58	1	0	0	1	0	0	0	0	2.77
59	0	0	0	1	0	0	0	0	0.22
60	0	0	0	1	0	0	0	0	0.22



1									
2									
3	0	1	0	1	0	0	0	0	4.03
4	1	1	0	0	0	0	0	0	2.12
5	1	1	0	0	0	0	0	0	2.10
6	0	0	0	1	0	0	0	0	0.00
7	1	1	0	1	0	0	0	0	1.53
8	0	0	0	1	0	0	0	0	13.21
9	0	0	0	1	0	0	0	0	0.00
10	0	0	1	0	0	0	0	1	9.97
11	0	0	0	0	0	0	0	0	0.00
12	1	1	0	0	0	0	0	0	3.05
13	0	0	0	0	0	0	0	0	0.00
14	1	1	0	1	0	0	0	1	2.68
15	0	0	0	0	0	0	0	0	0.00
16	1	0	0	1	0	0	0	0	0.00
17	0	1	0	1	0	0	0	0	0.00
18	0	1	0	1	0	0	0	0	0.29
19	1	0	0	0	0	0	0	0	9.55
20	1	1	0	1	0	0	0	0	5.03
21	0	0	0	0	0	0	0	0	0.00
22	1	0	0	1	0	0	0	0	2.88
23	0	0	0	1	0	0	0	0	0.00
24	0	0	0	1	0	0	0	0	1.15
25	0	0	0	0	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.00
27	1	1	0	1	0	0	0	0	5.37
28	0	0	0	0	0	0	0	0	3.49
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	0	0	0	0	0	0.00
31	0	0	0	0	0	0	0	0	0.00
32	1	0	0	1	0	0	0	0	3.84
33	0	1	0	0	0	0	0	0	4.60
34	1	0	0	0	0	0	0	1	0.38
35	0	0	0	0	0	0	0	0	0.00
36	0	0	0	1	0	0	0	0	0.00
37	0	1	0	1	0	0	0	0	9.34
38	1	0	0	1	0	0	0	0	9.64
39	1	1	0	1	0	0	0	0	7.48
40	0	1	0	1	0	0	0	0	0.00
41	1	0	0	1	0	0	0	0	0.00
42	0	0	0	0	0	0	0	0	0.00
43	0	1	0	0	0	0	0	0	0.00
44	1	1	0	1	0	0	0	0	0.88
45	1	1	0	0	1	0	0	1	9.97
46	1	1	0	1	0	0	0	0	0.00
47	0	0	0	0	0	0	0	0	0.00
48	0	0	1	0	0	0	0	0	0.00
49	1	0	0	1	0	0	0	1	5.33
50	0	1	0	1	0	0	0	0	2.01
51	1	1	0	1	0	0	0	0	0.00
52	0	1	1	0	0	0	0	1	4.86
53	1	0	0	1	0	0	0	0	0.86
54	0	0	0	0	0	0	0	0	0.07
55	0	0	0	1	0	0	0	0	5.34
56	1	0	0	1	0	0	0	0	0.00
57	0	0	0	1	0	0	0	0	4.58
58	0	1	0	1	0	0	0	0	0.00
59	1	0	0	0	0	0	0	0	2.88

1									
2									
3	1	1	0	0	0	0	0	1	4.51
4	0	0	0	1	0	0	0	0	2.07
5	0	1	0	1	0	0	0	0	0.09
6	1	1	0	1	0	0	0	0	5.51
7	0	1	1	1	0	0	0	0	5.08
8	0	0	0	0	0	0	0	0	0.23
9	1	1	0	1	1	0	0	0	6.85
10	0	0	0	0	0	0	0	1	0.00
11	1	1	1	1	0	0	0	0	5.75
12	0	0	0	1	0	0	0	0	5.15
13	0	0	1	0	0	0	0	0	0.77
14	0	0	0	0	0	0	0	0	3.26
15	1	1	0	1	0	0	0	1	2.22
16	0	0	0	0	0	0	0	0	0.00
17	1	1	0	1	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	0.00
19	1	1	0	1	0	0	0	0	10.78
20	1	0	0	1	0	0	0	0	0.00
21	1	1	0	1	1	0	0	0	2.79
22	0	0	0	1	0	0	0	0	0.19
23	0	1	0	1	0	0	0	1	0.00
24	0	0	0	0	0	0	0	0	0.63
25	0	1	0	1	0	0	0	0	4.99
26	1	1	1	1	0	0	0	1	3.07
27	0	1	0	0	0	0	0	0	0.86
28	0	0	0	0	0	0	0	1	7.01
29	0	1	1	0	0	0	0	0	0.07
30	1	0	0	0	0	0	0	0	0.14
31	1	0	0	1	0	0	0	0	3.45
32	1	1	0	0	0	0	0	0	8.38
33	1	1	1	0	1	0	0	1	7.01
34	1	1	0	1	0	0	0	0	0.48
35	1	1	0	1	0	0	0	0	6.04
36	1	1	0	1	0	0	0	0	0.00
37	0	0	1	1	0	0	0	0	2.68
38	1	1	0	0	0	0	0	0	0.19
39	1	1	0	1	0	0	0	0	6.90
40	1	0	1	1	0	0	0	0	1.05
41	1	1	0	1	0	0	0	0	2.03
42	0	0	0	0	0	0	0	0	0.00
43	1	1	1	1	0	0	0	0	0.41
44	1	0	0	1	0	0	0	0	5.95
45	0	0	0	0	0	0	0	0	0.22
46	1	1	0	0	0	0	0	0	2.82
47	0	1	0	1	0	0	0	0	0.00
48	0	0	0	1	0	0	0	0	0.00
49	0	0	0	0	0	0	0	0	0.00
50	0	0	0	0	0	0	0	0	0.00
51	1	1	0	0	0	0	0	0	1.34
52	1	0	0	1	0	0	0	0	5.23
53	1	0	0	0	0	0	0	0	1.82
54	0	0	0	1	0	0	0	0	0.00
55	0	1	0	0	0	0	0	1	0.00
56	0	0	0	0	0	0	0	0	0.00
57	0	1	0	0	0	0	0	0	3.07
58	1	1	0	1	0	0	0	1	5.07
59	1	0	1	1	0	0	0	1	4.23
60									

1									
2									
3	1	1	0	0	0	0	0	0	1.73
4	0	0	0	1	0	0	0	0	7.95
5	0	1	0	0	0	0	0	0	0.00
6	1	0	1	0	0	0	0	0	3.07
7	0	0	0	0	0	0	0	0	0.00
8	1	0	0	1	0	0	0	0	3.79
9	0	0	0	0	0	0	0	0	0.00
10	0	1	0	1	1	0	0	0	3.84
11	0	0	0	0	0	0	0	0	0.00
12	0	1	0	0	0	0	0	0	5.52
13	1	0	0	0	0	1	0	0	3.74
14	0	1	0	1	0	0	0	1	0.00
15	1	0	0	1	0	0	0	0	0.16
16	0	0	0	0	0	0	0	0	0.00
17	0	1	0	1	0	0	0	0	5.71
18	1	1	0	0	0	0	0	0	1.48
19	1	0	0	0	0	0	0	0	2.89
20	0	1	0	0	0	0	0	0	4.99
21	0	0	0	0	0	0	0	0	0.00
22	1	0	0	1	0	0	0	0	1.64
23	1	1	0	1	0	0	0	0	4.99
24	0	1	0	1	0	0	0	0	3.59
25	1	1	0	1	0	0	0	0	0.19
26	0	0	0	0	0	0	0	0	0.00
27	0	1	1	1	1	0	0	0	5.51
28	1	1	1	0	0	0	0	0	3.12
29	1	0	0	1	0	0	0	0	3.07
30	1	0	0	1	0	0	0	1	4.70
31	0	1	1	0	0	0	0	0	0.00
32	0	0	0	0	0	0	0	0	0.00
33	0	0	0	1	0	0	0	0	1.15
34	0	0	0	0	0	0	0	0	0.00
35	0	0	0	0	0	0	0	0	0.00
36	0	0	0	0	0	0	0	0	0.00
37	0	1	1	1	0	0	0	0	6.14
38	1	1	0	1	0	0	0	0	4.32
39	0	0	0	1	0	0	0	0	3.86
40	0	0	0	0	0	0	0	0	0.00
41	1	0	0	1	0	0	0	0	0.00
42	1	0	0	0	0	0	0	1	0.00
43	0	0	0	0	0	0	0	0	3.44
44	1	1	1	1	0	0	0	0	8.25
45	1	1	1	0	0	0	0	0	0.00
46	0	0	1	0	0	0	0	0	9.78
47	1	1	0	0	0	0	0	0	0.00
48	1	0	0	0	0	0	0	0	4.16
49	1	0	0	1	0	0	0	0	1.71
50	0	0	0	0	0	0	0	0	0.00
51	1	1	0	1	0	0	0	0	2.74
52	0	0	0	0	0	0	0	0	0.00
53	1	0	1	1	0	0	0	0	3.91
54	1	1	1	0	0	0	0	0	3.90
55	0	0	0	0	0	0	0	0	4.70
56	0	0	0	0	0	0	0	0	0.00
57	0	0	0	0	0	0	0	0	0.00
58	0	1	0	1	0	0	0	0	0.00
59	1	0	0	1	0	0	0	0	0.25
60	0	0	0	0	0	0	0	0	0.00

1									
2									
3	0	0	0	0	0	0	0	0	0.00
4	1	0	1	0	0	0	0	0	4.89
5	0	1	0	1	0	0	0	0	1.75
6	1	0	0	1	0	0	0	1	0.00
7	1	1	0	1	0	0	0	0	3.73
8	1	1	0	1	0	1	0	0	4.27
9	0	0	0	0	0	0	0	0	0.00
10	1	1	1	0	0	0	0	0	6.99
11	0	0	0	0	0	0	0	0	0.00
12	0	1	1	1	0	0	0	0	0.00
13	1	1	0	0	0	0	0	0	0.00
14	1	1	0	1	0	0	0	0	8.56
15	1	0	1	0	0	0	0	0	0.77
16	1	0	0	1	0	0	0	0	4.22
17	1	1	0	1	0	0	0	1	0.00
18	1	1	0	1	0	0	0	0	0.00
19	0	0	0	0	0	0	0	0	0.00
20	0	0	0	0	0	0	0	0	0.00
21	0	0	0	0	0	0	0	0	0.00
22	0	1	0	1	0	0	0	0	1.25
23	1	0	0	0	0	0	0	1	0.33
24	1	1	0	1	0	0	0	1	2.97
25	1	1	1	0	0	0	0	0	1.15
26	1	0	0	0	0	0	0	1	4.66
27	0	0	0	1	0	0	0	0	0.00
28	0	0	0	0	0	0	0	0	0.00
29	1	1	0	0	0	0	0	0	1.34
30	0	0	0	0	0	0	0	0	0.79
31	1	0	0	0	0	0	0	1	2.92
32	0	1	0	0	0	0	0	1	4.99
33	0	0	0	1	0	0	0	0	0.00
34	0	0	0	1	0	0	0	0	0.00
35	1	1	0	0	0	0	0	0	0.75
36	1	0	1	1	0	0	0	1	0.00
37	1	0	0	1	0	0	0	0	0.58
38	1	1	0	0	0	0	0	0	1.26
39	1	0	0	0	0	0	1	0	8.32
40	0	1	0	1	0	0	0	0	12.42
41	0	0	0	1	0	0	0	0	5.79
42	0	0	1	1	0	0	0	0	0.00
43	0	1	0	1	0	0	0	0	8.44
44	0	0	0	0	0	0	0	0	0.00
45	0	0	0	1	0	0	0	0	0.00
46	1	1	0	0	0	0	0	0	0.00
47	1	0	0	1	0	0	0	1	3.93
48	1	1	0	1	0	0	0	0	0.00
49	0	1	0	1	0	0	0	0	1.56
50	0	0	0	0	0	0	0	0	0.00
51	0	0	0	0	0	0	0	0	0.00
52	0	0	0	0	0	0	0	0	0.00
53	0	0	0	0	0	0	0	0	0.00
54	1	1	0	0	0	0	0	0	4.60
55	1	0	0	0	0	0	0	1	0.19
56	1	0	1	0	0	0	0	0	4.22
57	1	0	0	1	0	0	0	0	0.00
58	0	0	0	0	0	0	0	0	0.00
59	0	0	0	1	0	0	0	0	1.73
60	0	0	1	0	0	0	0	1	3.10

1									
2									
3	0	0	0	0	0	0	0	0	0.00
4	0	1	1	0	0	0	0	0	4.11
5	1	1	0	0	0	0	0	0	5.75
6	1	0	0	1	0	0	0	0	3.19
7	0	0	0	1	0	0	0	0	0.00
8	1	0	0	1	0	0	0	0	3.34
9	0	1	0	0	0	0	0	1	7.53
10	0	1	0	1	0	0	0	0	2.11
11	0	1	1	1	0	0	0	0	3.84
12	0	1	0	1	0	0	1	0	3.84
13	1	1	0	1	0	0	0	0	1.92
14	0	0	0	0	0	0	0	0	0.00
15	1	0	0	1	0	0	0	0	3.89
16	1	0	0	1	0	0	0	0	5.37
17	0	0	0	0	0	0	0	0	15.89
18	0	1	0	1	0	0	0	0	3.07
19	1	1	0	0	0	0	0	0	0.07
20	1	1	0	1	0	0	0	0	0.25
21	1	1	0	1	0	0	0	0	7.74
22	0	0	0	0	0	0	0	0	0.00
23	1	0	0	1	0	0	0	0	4.79
24	1	0	1	1	1	0	0	1	10.25
25	1	1	1	1	1	0	0	0	6.95
26	1	1	0	0	0	0	0	0	0.00
27	1	0	0	0	0	0	0	0	13.77
28	1	0	0	1	0	0	0	0	6.21
29	0	0	0	1	0	0	0	0	0.00
30	1	0	0	1	0	0	0	0	0.36
31	1	0	1	0	0	0	0	1	5.78
32	0	1	0	0	0	0	0	0	0.00
33	0	0	0	1	0	0	0	0	1.48
34	1	1	0	0	0	0	0	0	3.26
35	1	0	0	1	0	0	0	0	0.00
36	1	0	0	0	0	0	0	0	1.37
37	0	0	0	1	0	0	0	1	0.00
38	0	1	0	1	0	0	0	1	0.00
39	1	1	1	1	0	0	0	0	4.41
40	0	0	0	0	0	1	0	0	9.86
41	1	1	0	0	0	0	0	1	0.00
42	1	0	0	1	0	0	0	0	0.00
43	1	0	0	1	0	1	0	0	4.60
44	0	1	0	1	0	0	1	0	0.38
45	0	0	0	0	0	0	0	0	0.35
46	1	1	0	0	0	0	0	0	0.00
47	1	0	1	0	0	0	0	0	3.21
48	1	0	0	0	0	0	0	1	4.41
49	1	0	0	1	0	0	0	0	0.00
50	1	0	0	1	0	0	0	0	6.27
51	1	1	0	1	1	0	0	0	6.29
52	1	1	0	0	0	0	0	0	0.00
53	1	1	0	1	0	0	0	0	0.10
54	1	0	0	1	0	0	0	0	1.92
55	0	1	1	1	1	0	0	1	5.01
56	0	0	0	1	0	0	0	0	0.00
57	1	1	0	0	0	0	0	0	4.73
58	1	1	0	0	0	0	0	0	0.00
59	1	1	0	0	0	0	0	0	4.73
60	1	1	0	0	0	0	0	0	0.00

1									
2									
3	1	1	0	1	0	0	0	0	6.98
4	0	0	0	0	0	0	0	0	0.00
5	0	1	1	1	0	0	0	0	3.97
6	1	0	0	0	0	0	0	0	4.99
7	0	0	0	0	0	0	0	0	0.00
8	1	0	0	0	0	0	0	0	1.53
9	0	0	0	0	0	0	0	0	7.64
10	0	0	0	0	0	0	0	0	0.00
11	0	0	0	0	0	0	0	0	0.05
12	1	1	0	1	0	0	0	0	0.00
13	0	0	0	1	0	0	0	0	0.25
14	0	0	0	0	0	0	0	0	0.00
15	1	1	0	1	0	0	0	0	6.14
16	1	1	0	1	0	0	0	0	5.37
17	0	0	0	0	0	0	0	0	0.92
18	1	1	0	1	0	0	0	0	1.68
19	0	0	0	0	0	0	0	0	0.10
20	0	0	0	0	0	0	0	0	0.00
21	0	0	0	1	0	0	0	0	0.00
22	0	0	0	1	0	0	0	0	0.19
23	0	0	0	0	0	0	0	0	0.00
24	0	1	0	0	0	0	0	0	2.88
25	0	0	0	1	0	0	0	0	0.00
26	0	0	0	0	0	0	0	0	0.00
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	0	0	0	0	0	0.00
29	0	0	0	1	0	0	0	0	1.58
30	0	1	1	1	1	0	0	0	4.60
31	1	0	0	0	0	0	0	1	0.00
32	0	0	0	0	0	0	0	0	0.00
33	0	0	0	0	0	0	0	0	5.09
34	0	1	0	1	0	0	0	0	4.51
35	0	0	0	1	0	0	0	0	1.55
36	1	0	1	0	0	0	0	0	1.49
37	1	0	0	1	0	0	0	0	1.53
38	0	0	0	0	0	0	0	0	4.63
39	0	0	0	0	1	0	0	0	3.26
40	1	1	0	1	0	0	0	0	1.49
41	0	0	0	1	0	0	0	0	0.05
42	0	1	1	0	0	0	0	0	0.55
43	1	1	0	0	0	0	0	0	0.00
44	1	0	1	0	0	0	0	0	4.36
45	1	1	0	1	1	0	0	0	2.64
46	0	0	0	1	0	0	0	0	4.38
47	0	0	0	0	0	0	0	0	0.00
48	1	0	0	1	0	0	0	1	6.90
49	1	0	0	0	0	0	0	0	0.00
50	1	1	0	0	1	1	1	0	17.63
51	0	0	0	1	0	0	0	0	4.79
52	0	0	0	0	0	0	0	0	0.03
53	0	0	0	0	0	0	0	0	0.00
54	0	1	0	0	0	0	0	0	0.00
55	1	0	0	0	0	0	0	0	0.82
56	0	0	0	0	0	0	0	0	0.13
57	0	0	0	1	0	0	0	0	0.12
58	0	1	1	1	0	0	0	1	4.60
59	0	0	0	1	0	0	0	0	0.00
60	0	0	0	1	0	0	0	0	0.00

1									
2									
3	1	1	0	0	0	0	0	0	0.38
4	0	0	1	0	0	0	0	1	0.00
5	0	1	1	0	0	0	0	0	0.00
6	0	0	0	0	0	0	0	0	0.00
7	1	0	0	0	0	0	0	1	0.00
8	0	1	1	0	0	0	0	0	0.00
9	0	0	0	1	0	0	0	0	0.00
10	1	1	0	1	0	0	0	0	3.71
11	1	0	0	1	0	0	0	0	0.00
12	0	0	0	1	0	0	0	0	0.12
13	1	0	0	1	0	0	0	0	2.44
14	0	0	0	1	0	0	0	0	3.84
15	0	1	0	1	0	0	0	0	0.78
16	0	1	0	1	0	0	0	0	2.36
17	0	1	1	1	0	0	1	0	6.85
18	0	0	1	0	0	0	0	0	2.97
19	1	1	0	1	0	0	0	0	5.18
20	0	0	0	0	0	0	0	0	0.00
21	0	0	0	0	0	0	0	0	0.00
22	0	0	0	0	0	0	0	0	0.00
23	0	0	0	0	0	0	0	0	0.00
24	0	0	0	0	0	0	0	0	0.00
25	1	0	0	1	0	0	0	0	9.97
26	1	0	0	1	0	0	0	0	0.00
27	0	0	0	0	0	0	0	0	0.00
28	0	1	0	1	0	0	0	1	3.86
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	0	0	0	0	0	0.84
31	1	1	1	1	0	0	0	1	11.27
32	1	0	0	1	0	0	0	0	0.93
33	0	0	0	0	0	0	0	0	0.27
34	0	0	1	1	0	0	0	0	0.00
35	1	0	0	1	0	0	0	1	4.22
36	1	0	0	1	0	0	0	0	4.99
37	0	0	0	0	0	0	0	0	0.00
38	1	0	0	1	0	0	0	0	4.99
39	1	1	0	1	0	0	0	0	0.38
40	1	0	0	0	0	0	0	1	6.44
41	1	1	1	0	0	0	0	1	7.30
42	1	0	0	0	0	0	0	0	0.00
43	1	0	0	1	0	0	0	0	1.53
44	1	1	0	1	0	0	0	0	0.00
45	0	0	0	0	0	0	0	0	0.00
46	0	1	0	0	0	0	0	0	0.00
47	1	1	0	1	0	0	0	1	0.14
48	0	1	0	1	0	0	0	0	2.30
49	1	0	0	0	0	0	0	0	4.66
50	0	0	0	0	0	0	0	0	0.00
51	1	1	0	0	0	0	0	0	1.66
52	0	1	0	0	0	0	0	0	0.00
53	0	0	0	0	0	0	0	0	0.00
54	1	0	0	1	0	0	0	0	1.89
55	0	0	0	0	0	0	0	0	0.00
56	0	0	0	0	0	0	0	0	0.26
57	1	1	1	1	0	0	0	0	4.44
58	0	0	0	1	0	0	0	0	3.26
59	0	0	1	0	1	1	0	0	10.10
60	0	0	1	0	1	1	0	0	10.10

1									
2									
3	0	0	0	0	0	0	0	0	0.00
4	0	0	0	0	0	0	0	0	0.00
5	1	1	0	1	0	0	0	0	4.36
6	1	1	0	1	0	0	0	0	2.68
7	1	0	0	1	0	0	0	0	3.64
8	1	1	0	0	0	0	0	0	0.00
9	1	1	0	0	0	0	0	0	3.03
10	0	1	0	0	0	1	0	0	4.99
11	1	1	0	0	0	0	0	0	1.21
12	0	0	0	0	0	0	0	0	0.00
13	0	0	0	1	0	0	1	0	6.94
14	1	0	0	1	0	0	0	1	2.40
15	1	1	0	1	0	0	0	0	1.15
16	0	1	0	1	0	0	0	0	0.00
17	1	1	0	1	0	0	0	0	1.53
18	1	1	0	0	0	1	0	0	7.53
19	1	0	0	0	0	0	0	1	2.30
20	1	1	1	0	0	0	0	0	0.00
21	0	1	0	0	0	0	0	0	0.38
22	0	1	0	1	1	0	0	0	3.11
23	0	0	0	1	0	0	0	0	5.51
24	0	1	0	0	0	0	0	0	0.10
25	1	0	0	1	0	0	0	1	4.99
26	0	0	0	1	0	0	0	0	0.00
27	1	1	0	1	0	0	0	0	0.06
28	1	1	0	0	0	0	0	0	4.22
29	1	1	0	0	0	0	0	0	4.36
30	1	0	0	1	0	0	0	1	0.05
31	0	0	0	1	0	0	0	0	1.04
32	0	1	0	1	0	0	0	0	0.00
33	0	0	0	1	0	0	0	0	1.15
34	1	0	0	1	1	0	0	0	6.38
35	1	1	0	1	0	0	0	0	2.23
36	1	0	0	1	0	0	0	0	0.77
37	0	0	0	1	0	0	0	0	6.14
38	0	1	0	1	0	0	0	0	0.55
39	0	0	0	0	0	0	0	0	0.00
40	0	1	0	0	0	0	0	0	1.18
41	0	0	0	0	0	0	0	0	0.00
42	0	1	1	0	0	0	0	0	3.48
43	0	0	0	0	0	0	0	0	0.26
44	1	0	0	1	0	0	0	0	4.60
45	0	0	0	1	0	0	0	1	5.25
46	0	0	0	0	0	0	0	0	1.20
47	1	1	0	1	0	0	0	0	0.41
48	1	1	0	0	0	0	0	0	6.14
49	1	0	0	1	0	0	0	0	4.60
50	1	0	1	1	0	0	0	0	1.32
51	1	0	0	0	0	0	0	0	5.33
52	0	0	0	0	0	0	0	0	0.00
53	1	0	0	1	0	0	0	0	2.42
54	0	0	1	1	0	0	0	1	1.53
55	1	1	0	0	0	0	0	0	6.33
56	0	0	1	1	0	0	0	0	3.07
57	1	1	0	0	0	0	0	0	0.77
58	0	1	1	1	0	0	0	0	2.30
59	1	1	0	0	0	0	0	0	0.00
60	0	1	1	1	0	0	0	0	0.00



1									
2									
3	1	0	0	0	0	0	0	1	7.88
4	0	0	0	0	0	0	0	0	0.00
5	0	0	0	1	0	0	0	0	0.00
6	0	0	0	1	0	0	0	0	2.11
7	0	0	0	0	0	0	0	0	0.00
8	0	0	0	0	0	0	0	0	0.02
9	1	0	0	1	0	0	0	1	4.22
10	1	0	0	0	0	0	0	0	0.00
11	0	0	0	1	0	0	0	0	5.62
12	1	1	0	1	0	0	0	1	11.25
13	0	0	0	0	0	0	0	0	0.40
14	0	1	0	1	0	0	0	0	2.41
15	1	1	0	1	0	0	0	1	6.96
16	1	1	0	0	0	0	0	0	1.92
17	0	0	0	1	0	0	0	0	3.36
18	1	0	0	1	0	0	0	0	5.08
19	1	0	0	1	0	0	0	0	9.01
20	1	0	0	0	0	0	0	0	0.00
21	1	1	0	1	0	0	0	1	3.79
22	0	0	0	0	0	0	0	0	0.45
23	1	0	0	1	0	0	0	0	3.16
24	0	0	0	0	0	0	0	0	0.00
25	0	0	0	0	0	0	0	0	0.11
26	0	1	0	0	0	0	0	0	0.29
27	0	1	0	1	1	0	0	0	12.77
28	0	0	0	0	0	0	0	0	0.00
29	1	0	0	1	0	0	0	0	1.37
30	1	0	0	0	0	0	0	1	0.00
31	0	1	1	0	0	1	0	1	18.40
32	0	1	0	1	0	0	0	0	0.00
33	1	0	0	0	0	0	0	0	3.07
34	1	0	0	1	0	0	0	0	2.88
35	1	1	0	1	0	0	0	0	10.38
36	0	0	1	1	0	0	0	0	1.18
37	0	0	0	1	0	0	0	0	4.60
38	0	0	0	0	0	0	0	0	0.00
39	0	1	1	0	0	0	0	0	0.04
40	1	0	0	0	0	1	0	0	3.07
41	0	1	0	0	0	1	0	0	7.62
42	0	1	0	0	0	0	0	0	0.00
43	1	0	0	1	0	0	0	0	3.07
44	0	0	0	0	0	0	0	0	0.00
45	0	1	0	1	0	0	0	0	0.00
46	0	0	0	0	0	0	0	0	0.00
47	0	0	0	0	0	0	0	0	0.00
48	1	1	1	0	0	0	0	0	0.38
49	0	1	0	1	0	0	0	0	1.53
50	1	1	1	0	0	0	0	0	2.96
51	0	1	0	0	0	0	0	0	0.00
52	1	0	0	1	0	0	0	0	8.52
53	1	1	0	1	0	0	0	0	1.92
54	1	1	0	1	0	0	0	0	6.68
55	1	0	0	0	0	0	0	0	2.42
56	1	1	0	0	0	0	0	1	8.48
57	1	1	0	1	0	0	0	1	4.48
58	0	1	1	0	0	0	0	0	3.07
59	1	0	0	0	0	0	0	0	1.97
60									

1									
2									
3	1	0	0	0	0	0	0	0	0.00
4	1	1	0	1	0	0	0	0	0.12
5	0	0	0	1	0	0	0	0	0.00
6	0	0	1	0	0	0	0	0	11.03
7	1	1	0	1	0	0	0	0	5.66
8	0	0	0	0	0	0	0	0	0.00
9	1	0	0	1	0	0	0	0	0.00
10	1	1	1	0	0	0	0	0	2.52
11	1	0	0	1	0	1	0	1	1.17
12	0	0	0	0	0	0	0	0	0.00
13	0	0	0	1	0	0	0	0	0.00
14	0	0	0	0	0	0	0	0	0.00
15	0	0	0	1	0	0	0	0	0.00
16	0	0	0	0	0	0	0	0	0.05
17	1	1	0	1	0	0	0	0	4.66
18	1	1	0	0	0	0	0	0	6.90
19	1	0	0	1	0	0	0	0	0.00
20	0	0	1	1	0	0	0	0	5.48
21	1	0	0	1	0	0	0	0	0.00
22	0	0	0	1	0	0	0	0	1.92
23	0	1	0	1	0	0	0	0	1.92
24	0	0	0	0	0	0	0	0	0.00
25	0	1	0	1	0	0	0	0	2.30
26	0	0	0	1	0	0	0	0	1.15
27	1	0	0	0	0	0	0	0	2.68
28	0	0	0	0	0	0	0	0	0.77
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	0	0	0	0	0	0.00
31	0	0	0	0	0	0	0	0	0.00
32	1	1	0	1	0	0	0	0	8.63
33	0	0	0	0	0	0	0	0	0.07
34	1	1	0	0	0	0	0	1	2.21
35	1	0	0	0	0	0	0	0	4.85
36	0	1	0	1	0	0	0	0	1.82
37	0	1	0	1	0	0	0	0	3.64
38	0	0	0	0	0	0	0	0	0.00
39	1	1	0	1	0	0	0	1	8.15
40	0	0	1	1	1	0	0	0	0.00
41	1	1	0	1	0	0	0	0	6.26
42	1	1	0	1	0	1	0	0	4.99
43	1	1	0	0	0	0	0	0	1.53
44	1	0	0	1	0	0	0	1	0.00
45	1	0	0	1	0	0	0	0	3.72
46	1	1	0	0	0	0	0	0	2.30
47	0	0	0	1	0	0	0	0	6.90
48	1	1	0	0	0	0	0	0	3.26
49	1	1	0	0	0	0	0	0	4.51
50	1	1	0	1	0	0	0	0	0.34
51	0	1	0	0	0	0	0	0	0.25
52	0	0	0	0	0	0	0	0	4.95
53	1	1	0	1	0	0	0	0	4.03
54	1	1	0	0	0	0	0	0	1.53
55	0	0	0	0	0	0	0	0	0.00
56	0	0	0	0	0	0	0	0	0.00
57	0	0	0	0	0	0	0	0	0.71
58	0	0	0	1	0	0	0	0	3.95
59	0	0	0	0	0	1	0	0	4.02
60	1	0	0	0	0	0	0	0	

1									
2									
3	0	1	0	0	0	0	0	0	0.86
4	1	0	0	1	0	0	0	1	0.00
5	0	1	1	0	0	0	0	0	0.00
6	1	1	0	1	0	0	0	0	5.41
7	0	0	0	0	0	0	0	0	0.36
8	0	1	0	0	0	0	0	0	0.00
9	0	0	0	1	0	0	0	0	0.00
10	0	1	1	1	0	0	0	0	2.88
11	0	0	0	0	0	0	0	0	0.00
12	1	1	1	1	0	0	0	0	2.49
13	1	1	0	1	0	0	0	0	2.22
14	0	1	0	0	0	0	0	0	0.00
15	0	0	0	0	0	0	0	0	0.00
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	0	0	0	0	0	0.42
18	0	1	0	1	0	0	0	0	1.64
19	1	1	0	0	0	0	0	0	3.07
20	0	0	0	0	0	0	0	0	0.00
21	0	0	0	1	0	0	0	0	1.29
22	1	1	0	1	0	0	0	1	9.71
23	1	0	0	1	0	0	0	0	5.92
24	0	0	0	0	0	0	0	0	0.00
25	1	0	0	1	0	0	0	0	1.85
26	1	0	1	1	0	0	0	0	13.74
27	0	0	0	0	0	0	0	0	0.00
28	1	1	1	1	1	0	0	0	7.41
29	0	1	0	0	0	0	0	0	0.00
30	0	0	0	0	0	0	0	0	0.05
31	0	0	0	1	0	0	0	0	1.15
32	1	1	0	0	0	0	0	0	0.38
33	1	1	0	1	1	0	0	0	8.60
34	0	0	0	0	0	0	0	0	0.00
35	0	0	0	1	0	0	0	0	4.99
36	0	1	0	1	0	0	0	0	0.37
37	1	1	0	0	0	0	0	0	0.00
38	0	0	0	1	0	0	0	0	1.96
39	1	0	1	0	0	1	0	0	3.45
40	1	0	0	1	0	0	0	0	3.23
41	1	0	0	1	0	0	0	0	0.00
42	1	1	0	0	0	0	0	0	1.53
43	1	0	0	1	0	0	0	0	4.60
44	1	0	0	1	0	0	0	0	4.70
45	1	0	0	0	0	0	0	0	2.68
46	0	0	0	1	0	1	0	0	0.00
47	0	1	0	1	0	0	0	0	8.44
48	1	1	0	0	0	0	0	0	2.30
49	0	1	0	1	0	0	0	0	2.99
50	0	0	0	1	0	0	0	0	2.68
51	0	0	0	1	0	0	0	0	5.92
52	0	0	0	0	0	0	0	0	0.00
53	0	1	0	1	0	0	0	0	2.47
54	1	0	0	1	0	1	0	1	6.14
55	1	0	1	1	0	0	0	0	1.53
56	0	0	0	1	0	0	0	0	3.84
57	1	1	0	1	0	0	0	0	3.84
58	1	1	0	0	0	0	0	0	6.23
59	1	1	0	0	0	0	0	0	6.23
60	1	1	0	0	0	0	0	0	6.23

1									
2									
3	1	0	0	1	0	0	0	0	0.00
4	1	0	0	0	0	0	0	0	1.42
5	0	1	0	1	0	0	0	0	0.77
6	0	0	1	1	0	0	0	1	8.63
7	1	0	0	1	0	0	0	0	3.67
8	0	0	0	0	0	0	0	0	0.00
9	0	1	0	0	1	0	0	1	10.34
10	0	0	0	0	0	0	0	0	0.00
11	1	0	0	1	0	0	0	0	0.00
12	1	1	0	1	0	0	0	1	2.27
13	1	0	0	1	0	0	0	0	0.00
14	1	1	0	1	0	0	0	1	4.34
15	0	1	0	1	0	0	0	0	0.00
16	0	0	0	1	0	0	0	0	5.04
17	1	1	0	1	0	0	0	0	0.64
18	0	0	0	1	0	0	0	0	3.07
19	0	0	0	0	0	0	0	0	0.00
20	0	0	0	0	0	0	0	0	0.95
21	0	0	0	0	0	0	0	0	0.00
22	1	1	1	1	0	0	0	0	4.99
23	0	1	0	1	0	0	0	0	0.00
24	0	0	0	0	0	0	0	0	0.66
25	1	0	0	1	0	0	0	1	3.84
26	0	0	0	0	0	0	0	0	0.16
27	0	0	0	0	0	0	0	0	0.00
28	0	1	0	1	0	0	0	0	1.79
29	1	0	0	1	0	0	0	0	6.93
30	0	0	0	0	0	0	0	0	1.23
31	1	1	0	1	0	0	0	0	0.00
32	1	0	0	0	0	0	0	1	1.53
33	1	0	0	1	0	0	0	0	0.38
34	0	0	0	1	0	0	0	0	3.84
35	0	1	0	1	0	0	0	0	2.81
36	0	0	0	0	0	0	0	0	0.12
37	0	0	1	1	0	0	0	0	0.32
38	1	1	0	1	0	0	0	1	7.67
39	1	0	0	1	0	0	0	1	0.00
40	1	1	0	1	1	0	0	0	0.12
41	1	0	1	1	0	0	0	0	4.66
42	0	0	0	0	0	0	0	0	0.00
43	0	0	0	0	0	0	0	0	0.52
44	1	0	0	1	0	0	0	0	3.45
45	1	1	0	1	0	0	0	0	1.70
46	0	0	0	0	0	0	0	0	0.00
47	0	0	0	0	0	0	0	0	5.10
48	0	0	0	1	0	0	0	0	0.00
49	0	1	0	1	0	0	0	0	0.07
50	0	1	0	1	0	0	0	0	0.00
51	0	0	0	1	0	0	0	0	0.19
52	0	1	0	0	0	0	0	0	0.06
53	0	0	0	1	0	0	0	0	0.29
54	0	0	0	0	0	0	0	0	0.00
55	1	1	1	1	1	0	0	1	7.16
56	0	1	1	0	0	0	0	0	0.96
57	1	0	0	1	0	0	0	1	8.95
58	1	0	1	1	0	0	0	0	0.00
59	1	0	1	1	0	0	0	0	0.00
60	1	0	1	1	0	0	0	0	0.00

1									
2									
3	1	1	1	0	1	0	0	1	2.30
4	0	0	0	1	0	0	0	0	0.00
5	0	0	0	0	0	0	0	0	0.00
6	0	0	1	1	0	0	0	0	4.28
7	1	0	0	1	0	0	0	0	1.53
8	1	0	0	1	1	0	0	0	4.99
9	0	0	0	1	0	0	0	0	6.99
10	0	0	0	1	0	0	0	0	2.07
11	0	0	1	0	0	0	0	1	7.56
12	1	0	0	1	0	0	0	0	1.44
13	1	1	0	1	0	0	0	0	1.73
14	0	1	1	1	1	0	0	1	2.97
15	0	1	0	1	0	1	0	0	7.48
16	1	0	0	1	0	0	0	1	0.00
17	1	1	0	0	0	0	0	0	1.37
18	0	0	0	0	0	0	0	0	3.15
19	0	0	0	0	0	0	0	0	1.53
20	1	1	0	1	0	0	0	0	2.58
21	0	0	0	0	0	0	0	0	0.00
22	1	1	0	1	0	0	0	0	9.01
23	1	0	0	1	0	0	0	1	0.00
24	1	0	0	0	0	0	0	0	2.59
25	0	0	0	0	0	0	0	0	0.00
26	0	0	0	0	0	0	0	0	0.00
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	4.40
29	0	1	0	0	0	0	0	0	2.59
30	0	0	0	0	0	0	0	0	0.71
31	0	1	0	1	0	0	0	0	5.23
32	1	1	0	1	0	0	0	0	6.44
33	0	0	1	1	0	0	0	0	10.26
34	0	1	0	1	0	0	0	0	3.14
35	0	0	0	0	0	0	0	0	0.00
36	0	0	0	1	0	0	0	0	4.22
37	1	1	0	0	0	0	0	0	1.73
38	0	0	0	0	0	0	0	0	0.00
39	1	1	0	1	0	0	0	0	1.25
40	1	0	0	1	0	0	0	1	2.68
41	0	1	1	0	0	0	0	0	8.64
42	1	1	1	1	0	0	0	0	4.90
43	1	1	1	1	0	0	0	0	8.66
44	0	0	1	0	0	0	0	1	0.72
45	1	1	0	0	0	0	0	1	4.60
46	0	0	0	0	0	0	0	0	0.00
47	0	0	0	1	0	0	0	0	4.60
48	0	0	0	1	0	0	0	0	0.00
49	1	1	1	0	0	0	0	1	0.27
50	0	0	0	1	0	0	0	0	0.62
51	0	1	0	1	0	0	0	0	0.77
52	0	0	0	0	0	0	0	0	0.00
53	1	1	0	1	0	0	0	0	1.25
54	0	1	0	0	0	0	0	0	0.00
55	1	0	0	1	0	0	0	0	3.60
56	1	1	0	1	0	0	0	0	6.00
57	1	1	0	0	0	0	0	0	3.07
58	0	1	0	1	0	1	0	0	5.08
59	0	0	1	0	0	0	0	0	3.56
60									

1										
2										
3	0	1	0	0	0	0	0	0	0	3.64
4	0	0	0	0	0	0	0	0	0	0.00
5	0	1	1	0	1	0	0	1	1	5.25
6	1	1	1	0	0	0	0	0	0	0.14
7	1	1	0	0	0	0	0	0	0	7.04
8	1	0	0	0	0	0	0	0	0	2.11
9	0	0	0	0	0	0	0	0	0	0.48
10	1	0	0	1	0	0	0	0	0	2.30
11	1	0	0	1	0	0	0	0	0	7.44
12	0	1	0	1	0	0	0	0	0	7.67
13	1	0	0	0	0	0	0	0	1	4.60
14	1	1	0	1	0	0	0	0	0	6.15
15	0	0	0	0	0	0	0	0	0	0.00
16	1	0	0	1	0	0	0	0	0	8.05
17	1	0	0	1	0	0	0	0	0	0.38
18	0	0	0	0	0	0	0	0	0	0.00
19	0	0	0	1	0	0	0	0	0	0.00
20	1	0	0	0	0	0	0	0	0	3.73
21	0	1	0	0	0	0	0	0	0	11.89
22	0	0	1	1	0	0	0	0	0	0.68
23	1	1	0	1	0	0	0	0	1	10.07
24	1	1	0	1	0	0	0	0	0	0.99
25	1	1	0	1	0	0	0	0	0	4.55
26	1	0	1	0	1	0	0	0	1	7.10
27	0	0	0	0	0	0	0	0	0	0.11
28	0	1	0	0	0	0	0	0	0	0.00
29	1	0	1	1	0	0	0	0	0	5.63
30	1	1	0	0	0	0	0	0	0	2.33
31	1	1	0	0	0	0	0	0	0	5.55
32	0	0	0	0	0	0	0	0	0	0.00
33	0	0	0	0	0	0	0	0	0	2.78
34	0	0	0	0	0	0	0	0	0	0.00
35	1	0	0	1	0	0	0	0	0	1.67
36	1	0	0	0	0	0	0	0	0	1.15
37	0	0	0	0	1	0	0	0	0	0.00
38	1	1	0	1	0	0	0	0	0	2.30
39	0	0	0	1	0	0	0	0	0	6.25
40	0	0	0	0	0	0	0	0	0	0.00
41	0	1	0	1	0	0	0	0	0	3.49
42	1	0	0	1	0	0	0	0	0	1.25
43	0	0	1	1	0	0	0	0	0	28.96
44	1	1	0	0	0	0	0	0	0	3.36
45	1	0	0	1	0	0	0	0	0	0.00
46	0	0	0	0	0	0	0	0	0	0.00
47	1	1	1	1	0	0	0	0	1	13.36
48	0	0	0	1	0	0	0	0	0	0.31
49	1	1	0	0	0	0	0	0	0	4.56
50	0	0	0	1	0	0	0	0	0	0.42
51	1	0	0	1	0	0	0	0	0	0.86
52	1	0	0	0	0	0	0	0	0	1.78
53	1	0	1	1	0	0	0	0	1	4.60
54	0	0	0	1	0	0	0	0	0	0.00
55	1	0	1	0	0	0	0	0	0	0.00
56	1	0	0	0	1	0	0	0	0	18.93
57	0	0	0	0	0	0	0	0	0	0.70
58	1	1	0	1	0	0	0	0	1	5.25
59	0	0	0	0	0	0	0	0	0	
60	1	1	0	1	0	0	0	0	1	

1									
2									
3	1	1	0	0	0	0	0	0	4.44
4	1	0	0	1	0	0	0	0	0.38
5	1	0	0	0	0	0	0	1	0.00
6	0	0	1	1	1	0	0	0	0.36
7	1	0	0	1	0	0	0	0	1.44
8	0	0	0	0	0	0	0	0	0.00
9	1	0	1	1	0	0	0	0	1.53
10	0	0	0	0	0	0	0	0	0.12
11	0	0	0	0	0	0	0	0	0.00
12	0	1	0	1	0	0	0	0	4.93
13	0	1	0	0	0	0	0	0	3.07
14	0	0	0	0	0	0	0	0	0.25
15	0	0	0	0	0	0	0	0	0.00
16	1	0	0	1	0	0	0	0	3.04
17	1	1	0	1	0	0	0	0	3.70
18	0	0	0	0	0	0	0	0	7.67
19	1	1	0	1	0	0	0	0	4.93
20	0	1	0	0	0	0	0	0	2.33
21	0	0	0	0	0	0	0	0	0.00
22	1	1	0	1	0	0	0	0	4.60
23	1	1	0	1	0	0	0	0	6.00
24	0	0	0	0	0	0	0	0	0.19
25	0	1	0	1	0	0	0	0	0.00
26	1	1	0	1	0	0	0	0	2.68
27	1	0	0	1	0	0	0	1	0.12
28	0	1	0	1	0	0	0	0	4.60
29	0	0	0	1	0	0	0	0	1.23
30	0	0	0	0	0	0	0	0	0.00
31	1	0	0	1	0	0	0	0	2.68
32	0	1	1	1	1	0	0	0	13.66
33	1	0	0	1	0	0	0	0	1.25
34	0	0	0	0	0	0	0	0	0.00
35	0	0	0	0	0	0	0	0	0.00
36	0	1	1	1	0	1	0	0	4.60
37	0	0	0	1	0	0	0	0	3.67
38	0	1	0	0	0	0	0	0	0.00
39	0	0	0	1	0	0	0	0	0.00
40	1	0	1	1	0	0	0	0	4.60
41	0	0	0	0	0	0	0	0	18.05
42	0	0	0	0	0	0	0	0	0.00
43	0	1	1	1	1	0	0	1	1.89
44	1	0	1	1	0	0	0	1	2.78
45	1	1	0	0	0	0	0	1	4.62
46	0	0	0	1	0	0	0	0	5.08
47	1	1	0	0	0	0	0	0	0.77
48	1	0	0	0	0	0	0	0	0.05
49	1	0	0	0	0	0	0	0	0.08
50	0	0	0	0	0	0	0	0	0.00
51	0	0	0	0	0	0	0	0	1.73
52	0	0	1	0	0	0	0	0	0.00
53	1	0	0	1	0	0	0	0	1.51
54	0	1	0	1	0	0	0	0	6.19
55	0	0	0	0	0	0	0	0	0.00
56	0	0	0	0	0	0	0	0	0.58
57	0	0	0	1	0	0	0	0	0.88
58	0	0	0	0	0	0	0	0	0.00
59	0	0	0	1	0	0	0	0	0.88
60	1	1	0	1	0	0	0	0	3.55

1									
2									
3	1	1	0	1	0	0	0	0	0.06
4	1	1	0	1	0	0	0	0	4.41
5	1	1	0	1	0	0	0	0	1.56
6	1	1	0	1	0	0	0	0	0.00
7	0	0	0	0	0	0	0	0	0.00
8	0	0	0	0	0	0	0	0	0.00
9	0	0	0	1	0	0	0	0	0.66
10	1	1	0	1	0	1	0	0	2.25
11	0	1	0	1	0	0	0	0	0.00
12	0	0	0	0	0	0	0	0	0.00
13	0	0	0	1	0	0	0	0	0.33
14	0	1	0	0	0	0	0	0	1.53
15	0	0	0	0	0	0	0	0	0.00
16	0	1	0	0	0	0	0	0	0.00
17	0	1	0	0	0	0	0	0	0.33
18	0	1	0	1	0	0	0	0	6.59
19	1	1	0	0	0	0	0	1	4.82
20	1	0	0	1	0	0	0	0	0.71
21	1	0	0	1	0	0	0	1	0.00
22	1	0	0	1	0	0	0	0	0.00
23	1	1	0	1	0	0	0	0	5.07
24	1	1	0	1	1	1	0	0	14.10
25	0	1	0	0	0	0	0	0	0.52
26	1	1	0	1	0	0	0	0	2.19
27	1	1	0	1	0	0	0	0	6.71
28	0	1	0	1	0	0	0	0	1.53
29	0	0	0	1	0	0	0	0	0.00
30	0	1	1	0	0	0	0	0	0.05
31	0	0	1	1	0	0	0	1	0.00
32	1	1	0	1	0	0	0	1	6.99
33	0	1	0	1	0	0	0	0	0.00
34	0	0	0	0	0	0	0	0	3.84
35	0	0	0	0	0	0	0	0	0.00
36	0	0	0	0	0	0	0	0	0.00
37	0	0	0	0	0	0	0	0	0.00
38	0	1	0	1	0	0	0	0	0.08
39	1	1	0	1	0	0	0	0	3.26
40	0	0	0	1	0	0	0	0	5.82
41	1	1	0	1	0	0	0	0	6.14
42	0	0	0	0	0	0	0	0	0.14
43	1	0	0	0	0	0	0	1	7.40
44	1	1	1	0	0	0	0	0	2.74
45	1	0	0	0	0	0	0	1	4.99
46	1	1	0	1	0	0	0	0	1.73
47	0	1	0	1	1	0	0	0	4.60
48	1	1	0	0	0	0	0	0	10.18
49	1	1	0	0	0	0	0	0	1.37
50	0	0	0	0	0	0	0	0	0.00
51	1	0	0	0	0	0	0	1	7.67
52	0	0	0	0	0	0	0	0	0.00
53	1	0	0	0	0	0	0	0	0.00
54	0	0	0	0	0	0	0	0	0.00
55	0	0	0	1	0	0	0	0	0.77
56	0	1	0	1	0	0	0	0	0.00
57	1	0	0	1	0	0	0	0	2.90
58	0	0	0	0	0	0	0	0	0.00
59	0	0	0	1	0	0	0	0	0.06
60	0	0	0	1	0	0	0	0	0.06



1									
2									
3	0	0	0	1	0	0	0	0	0.00
4	0	0	0	0	0	0	0	0	0.00
5	1	0	0	0	0	0	0	1	0.00
6	1	0	0	0	0	0	0	0	2.19
7	0	0	0	1	0	0	0	0	1.15
8	0	0	0	1	0	0	0	0	0.00
9	0	0	0	0	0	0	0	0	0.00
10	0	0	0	1	0	1	0	0	1.62
11	0	0	0	1	0	1	0	0	6.14
12	0	0	0	1	0	1	0	0	5.25
13	0	0	0	1	0	0	0	0	0.25
14	0	0	1	0	0	0	0	0	1.57
15	1	0	0	1	1	0	1	0	25.41
16	0	0	0	1	0	1	1	0	3.26
17	0	0	0	0	0	0	0	0	4.08
18	0	0	0	0	0	1	0	0	0.52
19	0	1	0	0	1	0	0	0	2.93
20	0	0	0	0	0	0	0	0	0.00
21	0	0	0	0	0	0	0	0	0.00
22	0	0	0	0	0	0	0	0	0.00
23	0	0	0	0	1	0	0	0	0.67
24	0	0	0	0	0	0	0	0	0.00
25	0	0	0	0	0	0	0	0	0.00
26	0	0	0	0	0	0	0	0	8.99
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	0	0	1	0	0	17.41
29	1	0	0	1	0	0	0	0	4.66
30	0	0	0	1	0	0	0	0	2.30
31	0	0	0	1	1	0	0	0	0.41
32	0	0	0	0	0	0	0	0	0.74
33	1	1	0	0	0	0	0	0	0.77
34	0	0	0	1	0	0	0	0	0.00
35	0	0	0	1	0	0	0	0	3.07
36	0	0	0	0	0	0	0	0	2.38
37	0	0	0	1	0	0	0	0	0.00
38	1	0	0	0	0	1	0	0	7.33
39	1	0	0	0	0	0	0	0	0.00
40	0	0	0	0	0	0	0	0	5.56
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	0	0	0	0	0	2.05
43	0	0	0	0	0	0	0	0	0.00
44	0	0	0	0	0	0	0	0	0.00
45	0	0	0	1	0	0	0	0	2.49
46	0	0	0	1	0	0	0	0	5.37
47	0	0	0	0	0	0	0	0	2.30
48	0	0	0	0	0	0	0	0	0.00
49	0	0	0	1	0	0	0	0	0.00
50	0	0	0	0	0	0	0	0	0.00
51	0	0	0	1	0	0	0	0	5.40
52	0	0	0	0	0	0	0	0	1.10
53	1	0	0	1	0	0	0	0	2.40
54	0	1	0	1	0	0	0	1	1.53
55	0	0	0	0	0	0	0	0	1.48
56	0	0	0	0	0	0	0	0	0.00
57	0	0	0	1	0	0	0	0	3.45
58	0	0	0	0	0	0	0	0	1.10
59	0	0	0	1	0	0	0	0	0.00
60	0	0	0	1	0	0	0	0	0.00

1									
2									
3	0	0	0	0	0	0	1	0	2.82
4	0	0	0	1	0	0	0	0	0.00
5	0	0	0	0	0	0	0	0	0.00
6	0	0	0	0	0	0	1	0	0.00
7	0	0	0	0	0	0	0	0	0.07
8	0	0	0	1	0	0	0	0	0.00
9	0	0	0	1	0	0	0	0	4.99
10	0	0	0	1	0	0	0	0	0.00
11	1	0	0	0	0	0	0	0	20.07
12	0	0	0	0	0	0	0	0	2.21
13	0	0	0	0	0	0	0	0	2.11
14	0	0	0	0	0	0	0	0	0.00
15	1	0	0	1	0	0	0	0	3.63
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	0	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	2.84
19	0	0	0	1	0	0	0	0	0.00
20	0	0	0	0	0	0	0	0	3.53
21	0	0	0	0	0	0	0	0	10.84
22	0	0	0	0	0	0	0	0	2.30
23	0	0	0	0	0	0	0	0	0.14
24	0	0	0	0	0	0	0	0	3.04
25	1	0	0	0	0	0	0	0	0.00
26	0	0	0	0	0	0	0	0	0.00
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	1	0	1	0	0	2.30
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	0	0	0	1	0	4.12
31	0	0	0	1	0	0	0	0	0.82
32	0	0	0	1	0	0	0	0	0.90
33	0	1	0	0	0	0	0	0	0.00
34	0	0	0	1	0	0	0	0	0.00
35	0	0	0	1	0	0	0	0	3.82
36	0	0	0	0	0	0	0	0	3.75
37	0	0	0	0	0	0	0	0	0.78
38	0	0	0	0	0	0	0	0	6.14
39	0	0	0	0	0	0	0	0	1.19
40	0	0	0	0	0	1	0	0	11.32
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	0	0	0	0	0	0.58
43	0	0	0	0	0	0	0	0	0.00
44	0	0	0	0	0	1	0	0	8.82
45	0	0	0	0	0	0	0	0	0.03
46	0	0	0	0	0	0	0	0	1.73
47	0	0	0	0	0	0	0	0	0.00
48	0	0	0	1	0	0	0	0	2.34
49	0	0	0	0	0	0	0	0	0.00
50	0	0	0	0	0	1	0	0	9.19
51	0	0	0	0	0	0	0	0	0.00
52	0	0	0	1	0	0	0	0	5.86
53	0	0	0	0	0	0	0	0	0.00
54	0	0	0	0	0	0	0	0	0.00
55	0	0	0	0	0	0	0	0	4.72
56	0	0	0	0	0	1	0	0	0.25
57	0	0	0	0	0	0	0	0	0.01
58	0	0	0	0	0	0	0	0	0.00
59	0	0	0	0	0	0	0	0	1.73
60	0	0	0	0	0	0	0	0	1.73

1									
2									
3	0	0	0	0	0	0	0	0	0.00
4	0	0	0	0	0	0	0	0	0.00
5	0	0	0	1	0	0	0	0	0.00
6	0	0	0	0	0	0	0	0	5.01
7	0	0	0	0	0	0	0	0	0.00
8	0	0	0	1	0	0	0	0	9.97
9	0	0	0	0	0	0	0	0	0.00
10	0	0	0	1	0	0	0	0	0.18
11	0	0	0	0	0	0	0	0	0.64
12	0	0	0	0	0	0	0	0	2.26
13	0	0	0	1	0	0	0	0	4.47
14	0	0	0	0	0	1	1	0	7.16
15	0	0	0	1	0	0	0	0	0.11
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	1	0	0	0	0	2.30
18	0	0	0	0	0	0	0	0	13.79
19	0	0	0	0	0	1	0	0	0.00
20	0	0	0	0	0	0	0	0	0.00
21	0	0	0	0	0	0	0	0	1.37
22	0	0	1	0	0	0	0	0	11.67
23	0	0	0	0	0	0	1	0	9.49
24	1	0	0	0	0	1	0	0	0.00
25	0	0	0	0	0	0	0	0	0.00
26	0	0	0	0	0	0	0	0	0.00
27	0	0	0	1	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	0.58
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	0	0	0	0	0	6.29
31	0	0	0	0	0	0	0	0	0.00
32	0	0	0	0	0	0	0	0	0.00
33	0	0	0	0	0	0	0	0	0.15
34	1	0	0	1	0	0	0	0	1.66
35	0	0	0	0	0	0	0	0	0.38
36	0	0	0	0	0	0	0	0	0.00
37	0	0	0	1	0	0	0	0	4.41
38	0	0	0	0	0	0	0	0	0.00
39	0	0	0	0	0	0	0	0	0.00
40	0	0	0	0	0	1	0	0	6.90
41	0	0	0	0	0	0	0	0	0.08
42	0	0	0	0	0	0	0	0	6.18
43	0	0	0	0	0	0	0	0	2.48
44	0	0	0	0	0	0	0	0	0.00
45	0	0	0	1	0	0	0	0	1.99
46	0	0	0	1	1	0	0	0	5.48
47	0	0	0	0	0	0	1	0	2.49
48	0	0	0	1	0	0	0	0	1.08
49	0	0	0	0	0	1	0	0	3.84
50	0	0	0	1	0	0	0	0	1.25
51	0	0	0	0	0	0	0	0	2.59
52	1	0	0	1	1	0	0	0	18.70
53	0	0	0	0	0	0	1	0	4.60
54	0	0	0	0	0	0	0	0	0.58
55	0	0	0	0	0	0	0	0	0.96
56	0	0	0	0	0	1	0	0	0.19
57	0	0	0	1	0	0	0	0	1.73
58	0	0	0	0	0	0	0	0	0.00
59	0	0	0	0	0	0	0	0	0.00
60	0	0	0	0	0	0	0	0	0.00

1									
2									
3	0	0	0	1	0	0	0	0	3.84
4	0	0	0	1	0	0	0	0	0.00
5	1	0	0	1	0	0	0	0	3.07
6	0	0	0	1	0	0	1	0	1.53
7	0	0	0	0	0	0	0	0	0.00
8	0	0	0	1	0	1	0	0	2.47
9	0	0	0	1	0	0	0	0	0.00
10	0	0	0	1	0	1	0	0	3.84
11	0	0	0	0	0	0	0	0	0.00
12	0	0	0	0	0	0	0	0	0.25
13	0	0	0	0	0	0	0	0	1.53
14	0	0	0	1	0	0	0	0	2.68
15	0	0	0	0	0	0	0	0	0.16
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	1	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	2.01
19	0	0	0	0	0	0	0	0	1.92
20	0	0	0	1	1	0	0	0	2.29
21	0	0	0	1	0	0	1	0	2.41
22	0	0	0	0	0	0	0	0	7.48
23	0	0	0	0	0	0	0	0	0.00
24	0	0	0	0	0	0	0	0	2.47
25	0	0	0	0	0	0	0	0	1.07
26	0	0	0	0	0	0	0	0	0.00
27	0	0	0	1	0	0	1	0	14.11
28	0	0	0	0	0	0	0	0	0.00
29	0	0	0	1	0	0	1	0	1.84
30	0	0	0	1	0	0	0	0	1.81
31	0	0	0	0	0	0	0	0	1.03
32	0	0	0	0	0	1	0	0	1.68
33	0	0	0	0	0	0	0	0	0.00
34	0	0	0	1	0	0	0	0	10.12
35	0	0	0	0	0	0	0	0	4.18
36	0	0	0	1	0	0	0	0	0.00
37	1	1	0	1	0	0	0	0	4.79
38	0	0	0	0	0	0	0	0	5.62
39	0	0	0	1	0	0	0	0	0.96
40	0	0	0	0	0	0	0	0	0.00
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	0	0	0	0	0	0.00
43	0	0	0	0	0	0	0	0	0.00
44	0	0	0	0	0	0	0	0	0.60
45	0	0	0	1	0	0	0	0	2.46
46	0	0	0	0	0	0	0	0	0.00
47	0	0	0	0	0	0	0	0	1.73
48	0	0	0	0	0	0	0	0	0.00
49	0	0	0	0	0	0	0	0	0.77
50	0	0	0	0	0	0	0	0	0.00
51	0	0	0	0	0	0	0	0	7.70
52	0	0	0	0	0	0	0	0	0.00
53	0	0	0	0	0	0	0	0	0.00
54	0	0	1	1	0	0	0	0	7.32
55	0	0	0	0	0	0	0	0	2.01
56	0	0	0	1	1	0	0	0	7.95
57	0	0	0	0	0	0	0	0	0.00
58	0	0	0	0	0	0	0	0	3.07
59	0	0	0	1	0	0	0	0	2.30
60	0	0	0	1	0	0	0	0	2.30

1									
2									
3	0	0	0	1	1	0	0	0	11.10
4	0	0	0	1	0	0	0	0	1.57
5	0	0	0	1	0	0	0	0	0.00
6	1	0	0	1	0	0	1	0	1.53
7	0	0	0	0	0	0	0	0	0.08
8	0	0	0	0	0	0	0	0	0.00
9	0	0	0	0	0	0	0	0	0.00
10	0	0	0	1	0	0	0	0	16.49
11	0	0	0	0	0	0	0	0	0.00
12	0	0	0	0	0	0	0	0	0.07
13	0	0	0	0	0	0	0	0	0.00
14	0	0	0	1	0	0	0	0	0.96
15	0	0	0	0	0	0	0	0	0.00
16	0	0	0	0	0	0	0	0	4.25
17	0	0	0	0	0	0	0	0	0.00
18	0	0	0	0	0	0	0	0	0.00
19	1	0	0	1	0	0	0	0	1.22
20	0	0	0	1	0	0	0	0	19.21
21	0	0	0	1	0	0	0	0	4.88
22	1	1	0	1	0	1	0	0	40.52
23	1	0	0	0	0	0	0	0	4.82
24	0	0	0	0	0	1	0	0	3.07
25	1	0	0	0	0	0	0	0	3.55
26	0	0	0	1	0	1	0	0	15.00
27	0	0	0	0	0	1	0	0	8.93
28	0	0	0	1	0	0	0	0	7.77
29	0	0	0	1	0	1	0	0	3.24
30	1	0	0	1	0	0	0	0	0.58
31	1	0	0	1	0	0	0	0	0.00
32	0	0	0	1	0	0	0	0	10.07
33	0	0	0	0	0	0	0	0	0.04
34	0	0	0	0	0	0	0	0	0.58
35	0	0	0	1	0	0	0	0	0.19
36	0	0	0	0	0	1	0	0	0.00
37	0	0	0	1	0	0	0	0	14.60
38	1	0	0	0	1	0	0	0	5.81
39	0	0	0	0	0	0	1	0	2.88
40	0	0	0	1	0	1	0	0	19.99
41	1	0	0	0	1	1	0	0	9.75
42	0	0	0	1	0	1	1	0	7.32
43	0	0	0	1	0	0	0	0	9.22
44	1	0	0	1	0	0	0	0	6.49
45	1	0	0	1	0	0	0	0	8.47
46	0	0	0	0	0	0	0	0	8.82
47	1	0	0	1	0	0	0	0	4.41
48	0	0	0	1	0	0	0	0	2.05
49	0	0	0	1	0	0	0	0	3.60
50	0	0	0	1	0	0	0	0	0.38
51	0	0	0	0	0	0	0	0	8.77
52	0	0	0	0	0	1	0	0	7.45
53	0	0	0	1	0	0	0	0	3.29
54	0	0	0	0	0	1	0	0	4.22
55	1	0	0	1	0	0	0	0	4.99
56	0	0	0	1	0	1	0	0	0.00
57	0	0	0	0	0	1	0	0	0.25
58	0	0	0	1	0	0	0	0	3.45
59	0	0	0	1	0	0	0	0	
60	0	0	0	1	0	0	0	0	

1									
2									
3	0	0	0	0	0	0	0	0	0.00
4	0	0	0	0	1	0	1	0	17.71
5	0	0	0	1	0	0	0	0	13.81
6	1	0	0	1	0	0	0	0	12.93
7	0	0	0	0	0	1	0	0	4.50
8	0	0	0	1	0	0	0	0	1.79
9	0	0	0	1	0	0	0	0	1.95
10	0	0	0	0	0	0	0	0	10.44
11	0	0	0	0	0	0	0	0	3.37
12	0	0	0	0	0	0	0	0	7.84
13	0	0	0	1	0	0	0	0	5.32
14	0	0	0	0	0	0	1	0	0.55
15	0	0	0	0	0	0	0	0	6.44
16	1	0	0	1	0	0	0	0	5.25
17	0	0	0	0	0	0	0	0	0.00
18	0	0	0	1	0	1	0	0	5.47
19	1	0	0	0	0	1	0	0	21.12
20	1	0	0	0	1	1	0	0	11.21
21	0	0	0	0	0	0	0	0	12.01
22	0	0	0	0	0	0	0	0	0.00
23	0	0	0	0	0	0	0	0	0.00
24	0	0	0	1	0	0	0	0	5.63
25	1	0	0	1	0	0	0	0	13.04
26	1	0	0	0	0	0	0	0	8.74
27	1	0	0	1	0	0	0	0	12.77
28	0	0	0	0	0	0	0	0	0.00
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	1	1	1	1	0	15.95
31	0	0	0	1	0	0	0	0	0.76
32	1	0	0	1	0	1	0	0	9.84
33	0	0	0	0	0	1	0	0	14.00
34	1	0	0	1	0	0	0	0	13.15
35	0	0	0	0	0	1	0	0	32.99
36	0	0	0	1	0	0	0	0	11.84
37	1	0	0	1	0	0	0	0	19.25
38	0	0	0	0	0	0	0	0	1.08
39	0	0	0	1	0	0	0	0	2.55
40	1	0	0	0	0	0	0	0	2.99
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	0	0	0	0	0	0.00
43	1	0	0	1	0	0	0	0	8.44
44	0	0	0	1	0	0	0	0	6.14
45	0	0	0	0	0	1	0	0	11.86
46	1	0	0	0	0	0	0	0	4.22
47	1	0	0	0	0	0	0	0	3.87
48	0	0	0	0	0	0	0	0	0.00
49	1	0	0	1	0	0	0	0	22.48
50	0	0	0	0	0	1	0	0	6.84
51	0	0	0	1	0	0	0	0	2.30
52	0	0	0	0	0	0	0	0	12.71
53	0	0	0	1	0	0	0	0	4.25
54	0	0	0	0	0	0	0	0	0.00
55	0	0	0	0	0	1	0	0	2.68
56	0	0	0	0	0	1	0	0	8.29
57	0	0	0	0	0	0	0	0	15.00
58	1	0	0	1	0	0	1	0	6.89
59	0	0	0	0	0	0	0	0	0.05
60	0	0	0	0	0	0	0	0	0.05

1									
2									
3	0	0	0	0	0	0	0	0	0.00
4	0	0	0	1	0	0	0	0	4.41
5	0	0	0	1	0	1	0	0	5.07
6	0	0	0	0	0	0	0	0	8.65
7	0	0	0	0	0	1	0	0	6.90
8	0	0	0	1	0	0	1	0	15.73
9	0	0	0	1	0	0	0	0	0.00
10	0	0	0	1	0	0	0	0	13.84
11	0	0	0	0	0	0	0	0	0.00
12	0	0	0	1	0	0	0	0	0.53
13	0	0	0	0	0	0	0	0	0.00
14	0	0	0	1	0	0	0	0	18.60
15	0	0	0	1	0	0	1	0	3.73
16	1	0	0	1	0	0	0	0	1.53
17	0	0	0	0	0	0	0	0	1.15
18	0	0	0	0	0	0	0	0	6.59
19	0	0	0	1	0	1	0	0	9.01
20	0	0	0	0	0	1	0	0	9.21
21	0	0	0	1	0	0	0	0	3.26
22	0	0	0	0	0	0	0	0	0.00
23	0	0	0	0	0	0	0	0	0.00
24	0	0	0	0	0	0	0	0	0.00
25	0	0	0	0	0	1	0	0	1.73
26	0	0	0	1	0	0	0	0	0.50
27	0	0	0	0	0	1	0	0	1.59
28	1	0	0	1	0	1	0	0	41.45
29	0	0	0	0	0	1	0	0	0.89
30	1	0	0	0	0	0	0	0	3.07
31	0	0	0	1	0	1	0	0	2.30
32	0	0	0	0	0	0	0	0	0.00
33	0	0	0	0	0	0	0	0	0.00
34	0	0	0	1	0	0	0	0	0.30
35	0	0	0	0	0	0	0	0	0.37
36	1	0	1	1	1	0	1	0	15.88
37	0	0	0	1	0	0	0	0	16.40
38	0	0	0	1	0	1	0	0	0.77
39	0	0	0	1	0	0	0	0	0.00
40	0	0	0	1	0	1	0	0	5.35
41	0	0	0	0	0	0	0	0	0.00
42	1	0	0	1	0	1	0	0	2.00
43	0	0	0	1	0	0	0	0	0.00
44	1	1	0	1	0	0	0	0	9.53
45	0	0	0	0	0	1	0	0	2.76
46	0	0	0	1	0	0	0	0	0.00
47	1	1	0	1	0	0	0	0	13.14
48	0	0	0	0	0	1	0	0	11.75
49	1	0	0	1	0	0	1	0	24.52
50	0	0	0	0	0	0	0	0	0.04
51	0	0	0	1	0	0	0	0	2.11
52	0	0	0	0	0	1	0	0	3.45
53	1	0	0	0	0	0	0	0	9.04
54	1	0	0	1	0	0	0	0	17.47
55	0	0	0	0	0	1	0	0	15.26
56	0	0	0	0	0	0	0	0	18.79
57	0	0	0	0	0	0	0	0	8.36
58	0	0	0	0	0	0	0	0	13.44
59	0	0	0	0	0	0	0	0	13.44
60	1	0	0	0	0	0	0	0	8.89

1									
2									
3	0	0	0	0	0	0	0	0	3.33
4	0	0	0	0	0	0	0	0	0.00
5	0	0	0	1	0	0	0	0	9.21
6	0	0	0	0	0	0	0	0	5.01
7	1	0	0	0	0	0	0	0	5.62
8	0	0	0	0	0	0	0	0	0.16
9	1	0	0	1	0	0	0	0	11.33
10	0	0	0	0	0	0	0	0	9.59
11	0	1	0	1	0	0	0	0	53.88
12	0	0	0	0	0	0	0	0	35.45
13	0	0	0	1	0	0	0	0	0.45
14	0	0	0	0	0	0	0	0	0.00
15	0	0	0	0	0	1	0	0	5.95
16	1	0	0	0	0	0	0	0	0.77
17	0	0	0	1	0	0	0	0	1.73
18	0	0	0	0	0	1	0	0	3.45
19	0	0	0	0	0	0	0	0	0.00
20	0	0	0	0	0	1	0	0	0.41
21	0	0	0	0	0	1	0	0	5.68
22	1	0	0	0	0	0	0	0	4.99
23	0	0	0	0	0	0	0	0	2.14
24	0	0	0	0	0	1	0	0	8.52
25	0	0	0	0	0	0	0	0	3.58
26	1	0	0	1	0	1	0	0	5.23
27	0	0	0	0	0	0	0	0	0.08
28	0	0	0	0	0	0	0	0	0.00
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	0	0	0	0	0	0.00
31	1	0	0	0	0	1	0	0	22.11
32	0	0	0	0	0	1	0	0	13.42
33	0	0	0	0	0	1	0	0	1.15
34	0	0	0	0	0	0	0	0	0.00
35	0	0	0	0	0	0	0	0	0.59
36	0	0	0	0	0	0	0	0	0.00
37	1	0	0	1	1	0	0	0	1.42
38	0	0	0	0	0	1	0	0	7.86
39	0	0	0	0	0	1	0	0	3.34
40	0	0	0	0	0	0	0	0	0.12
41	0	0	0	0	0	1	1	0	15.26
42	0	0	0	1	0	0	0	0	18.79
43	1	0	0	0	0	0	0	0	3.45
44	0	0	0	0	0	0	0	0	0.00
45	0	0	0	0	0	0	0	0	8.44
46	0	0	0	0	1	0	0	0	23.21
47	1	0	0	1	0	0	0	0	4.79
48	0	0	0	0	0	0	0	0	3.38
49	1	0	0	0	0	0	0	0	5.14
50	0	0	0	0	0	1	0	0	1.60
51	0	0	0	0	0	0	0	0	0.00
52	1	0	0	1	0	0	0	0	6.62
53	0	0	0	1	0	0	0	0	3.64
54	0	0	0	0	0	1	0	0	0.00
55	1	0	0	1	0	1	0	0	7.83
56	0	0	0	0	0	1	0	0	1.15
57	0	0	0	0	0	1	0	0	4.60
58	1	0	0	0	0	1	1	0	109.66
59	1	0	0	1	0	1	0	0	0.00
60	1	0	0	1	0	1	0	0	0.00



1									
2									
3	1	0	0	0	0	0	0	0	18.75
4	1	0	0	1	0	0	0	0	9.44
5	0	0	0	0	1	0	0	0	14.63
6	0	0	0	0	0	1	0	0	22.44
7	0	0	0	0	0	0	0	0	0.66
8	1	0	0	1	0	1	0	0	9.25
9	0	0	0	0	0	0	0	0	0.00
10	0	0	0	0	0	0	0	0	0.00
11	0	0	0	0	0	0	0	0	0.00
12	0	0	0	0	0	0	0	0	0.00
13	1	0	0	1	0	0	0	0	6.85
14	0	0	0	0	0	1	0	0	3.26
15	0	0	0	0	0	0	0	0	0.00
16	0	0	0	1	0	0	0	0	0.00
17	0	0	0	1	0	0	0	0	5.27
18	0	0	0	1	0	0	0	0	0.00
19	0	0	0	1	0	0	0	0	0.66
20	0	0	0	0	0	0	0	0	0.06
21	0	0	0	1	0	0	0	0	0.40
22	0	0	0	0	0	0	0	0	0.00
23	0	0	0	0	0	0	0	0	0.00
24	0	0	0	0	0	0	0	0	0.00
25	0	0	0	1	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.00
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	0.00
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	1	0	0	0	0	3.07
31	0	0	0	1	0	0	0	0	0.41
32	0	0	0	1	0	0	0	0	0.00
33	0	0	0	0	0	0	0	0	0.00
34	0	0	0	1	0	0	0	0	0.00
35	0	0	0	0	0	0	0	0	0.00
36	0	0	0	0	0	0	0	0	1.15
37	0	0	0	1	0	0	0	0	0.77
38	0	0	0	0	0	0	0	0	0.00
39	0	0	0	1	0	0	0	0	0.63
40	0	0	0	1	0	0	0	0	3.84
41	0	0	0	1	0	1	0	0	3.84
42	0	0	0	0	0	0	0	0	0.49
43	0	0	0	0	0	0	0	0	0.22
44	0	0	0	1	0	0	0	0	0.06
45	0	0	0	1	0	0	0	0	4.78
46	0	0	0	1	0	0	0	0	0.16
47	0	0	0	1	0	0	0	0	1.93
48	0	0	0	1	0	0	0	0	4.16
49	0	0	0	0	0	0	0	0	0.58
50	0	0	0	1	0	0	0	0	0.00
51	0	0	0	1	0	0	0	0	0.00
52	0	0	0	1	0	0	0	0	0.16
53	0	0	0	1	0	0	0	0	0.08
54	0	0	0	1	0	0	0	0	0.00
55	0	0	0	0	0	0	0	0	0.77
56	0	0	0	0	0	0	0	0	0.19
57	0	0	0	0	0	0	0	0	5.95
58	0	0	0	0	0	0	0	0	0.00
59	0	0	0	0	0	0	0	0	0.00
60	0	0	0	1	0	0	0	0	0.00

1									
2									
3	0	0	0	1	0	0	0	0	2.71
4	0	0	0	1	0	0	0	0	0.00
5	0	1	0	0	0	0	0	0	0.05
6	0	0	0	0	0	0	0	0	0.09
7	0	0	0	0	0	0	0	0	0.00
8	0	0	0	0	0	0	0	0	0.12
9	0	0	0	1	0	0	0	0	3.25
10	0	0	0	1	0	0	0	0	1.73
11	1	1	0	1	1	0	0	0	7.97
12	0	0	0	0	0	0	0	0	0.16
13	1	0	0	1	0	0	0	0	17.18
14	0	0	0	0	0	0	0	0	0.12
15	0	0	0	1	0	0	0	0	0.00
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	1	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	0.00
19	0	0	0	0	0	0	0	0	0.00
20	0	1	0	1	0	0	0	0	2.60
21	0	0	0	1	0	0	0	0	0.16
22	0	0	0	1	0	0	0	0	0.19
23	0	0	0	0	0	0	0	0	0.00
24	0	0	0	0	0	0	0	0	0.00
25	0	0	0	1	0	0	0	0	7.40
26	0	0	0	0	0	0	0	0	0.00
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	0.00
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	1	0	0	0	0	3.33
31	0	0	0	0	0	0	0	0	3.84
32	0	0	0	0	0	0	0	0	8.25
33	0	0	0	1	0	0	0	0	0.00
34	0	0	0	1	0	0	0	0	30.07
35	0	1	0	1	0	0	0	0	1.14
36	0	0	0	0	0	0	0	0	0.00
37	0	0	0	0	0	0	0	0	0.12
38	0	0	0	0	0	0	0	0	0.00
39	0	0	0	0	0	0	0	0	3.22
40	0	0	0	1	0	0	0	0	0.05
41	0	0	0	0	0	0	0	0	0.04
42	0	0	0	1	0	0	0	0	0.00
43	1	0	0	1	0	0	0	0	0.00
44	0	0	0	1	0	0	0	0	0.00
45	0	0	0	0	0	0	0	0	0.00
46	0	0	0	0	0	0	0	0	0.00
47	0	0	0	1	0	0	0	0	0.14
48	0	0	0	1	0	0	0	0	0.29
49	0	0	0	0	0	0	0	0	0.00
50	0	0	0	1	0	0	0	0	3.74
51	0	0	0	1	0	0	0	0	1.10
52	0	0	0	0	0	0	0	0	3.84
53	0	0	0	0	0	0	0	0	2.05
54	0	0	0	0	0	0	0	0	0.00
55	0	0	0	1	0	0	0	0	1.51
56	0	0	0	1	0	1	0	0	29.77
57	0	0	0	0	0	0	0	0	0.74
58	0	0	0	0	0	0	0	0	0.00
59	0	0	0	0	0	0	0	0	0.00
60	0	0	0	0	0	0	0	0	0.00

1									
2									
3	0	0	0	0	0	0	0	0	4.47
4	0	0	0	1	0	0	0	0	0.06
5	0	0	0	1	0	0	0	0	0.19
6	0	0	0	0	0	0	0	0	0.00
7	0	0	0	1	0	0	0	0	0.00
8	0	0	0	0	0	0	0	0	0.77
9	0	0	0	1	0	0	0	0	5.37
10	0	0	0	0	0	0	0	0	0.00
11	0	0	0	1	0	0	0	0	0.00
12	0	0	0	0	0	0	0	0	0.00
13	0	0	0	0	0	0	0	0	0.00
14	1	0	0	1	0	0	0	0	0.00
15	0	0	0	1	0	0	0	0	0.12
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	1	0	0	0	0	0.23
18	0	0	0	1	0	0	0	0	0.00
19	0	0	0	0	0	0	0	0	0.14
20	0	0	0	1	0	0	0	0	0.00
21	0	0	0	1	0	0	0	0	0.00
22	0	0	0	0	0	0	0	0	0.40
23	0	0	0	1	0	0	0	0	0.00
24	0	0	0	1	0	0	0	0	0.14
25	0	0	0	0	0	0	0	0	5.45
26	0	0	0	0	0	0	0	0	0.00
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	0	0	0	0	0	0.00
29	0	0	0	1	0	1	0	0	0.96
30	0	0	0	0	0	0	0	0	0.30
31	0	0	0	0	0	0	0	0	0.10
32	0	0	1	1	0	1	1	0	0.00
33	0	0	0	1	0	0	0	0	1.02
34	0	0	0	1	0	0	0	0	0.00
35	0	0	0	1	0	0	0	0	0.00
36	0	0	0	1	0	0	0	0	0.00
37	0	0	0	1	0	1	0	0	2.36
38	0	0	0	1	0	0	0	0	0.00
39	0	0	0	0	0	0	0	0	0.00
40	0	0	0	1	0	0	0	0	2.88
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	1	0	0	0	0	0.00
43	0	0	0	1	0	0	0	0	0.00
44	1	0	0	1	0	1	0	0	10.82
45	0	0	0	1	0	0	0	0	0.00
46	0	0	0	1	0	0	0	0	0.25
47	0	1	0	1	0	0	0	0	0.00
48	0	0	0	1	0	0	0	0	0.00
49	0	0	0	1	0	0	0	0	6.33
50	0	0	0	0	0	0	0	0	5.04
51	0	0	0	1	0	0	0	0	0.00
52	0	0	0	0	0	0	0	0	0.00
53	0	0	0	0	0	0	0	0	0.00
54	0	0	0	1	0	0	0	0	0.38
55	0	0	0	1	0	1	0	0	0.77
56	0	0	0	1	0	0	0	0	0.25
57	0	0	0	1	0	0	0	0	0.00
58	0	0	0	1	0	0	0	0	0.29
59	0	0	0	0	0	0	0	0	0.00
60	0	0	0	0	0	0	0	0	0.00

1									
2									
3	0	0	0	1	0	0	0	0	0.00
4	1	0	0	1	1	1	0	1	2.25
5	0	0	0	0	0	0	0	0	0.12
6	0	0	0	1	0	0	0	0	0.00
7	0	0	0	1	0	0	0	0	3.45
8	0	0	0	0	0	0	0	0	0.00
9	0	0	0	0	0	0	0	0	0.00
10	0	0	0	0	0	0	0	0	5.38
11	0	0	0	0	0	0	0	0	2.81
12	1	0	0	1	0	0	0	0	4.60
13	0	1	0	1	0	1	0	0	1.07
14	1	0	0	1	0	0	0	0	0.19
15	0	0	0	0	0	0	0	0	0.00
16	0	1	0	1	0	0	0	0	2.88
17	0	0	0	0	0	0	0	0	21.40
18	0	0	0	1	0	0	0	0	0.11
19	1	0	0	1	0	0	0	0	0.38
20	0	0	0	0	0	0	0	0	0.00
21	0	0	0	0	0	0	0	0	0.00
22	0	0	0	0	0	0	0	0	0.00
23	0	0	0	1	0	0	0	0	0.08
24	0	0	0	0	0	0	0	0	0.00
25	0	0	0	1	0	0	0	0	0.79
26	0	0	0	1	0	0	0	0	0.00
27	0	0	0	1	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	0.00
29	0	0	0	1	0	0	0	0	0.00
30	0	0	0	1	0	0	0	0	0.58
31	0	0	0	1	0	0	0	0	0.77
32	0	0	0	0	0	0	0	0	0.00
33	0	0	0	0	0	0	0	0	0.00
34	0	0	0	0	0	0	0	0	0.00
35	0	0	0	1	0	0	0	0	2.49
36	1	0	0	1	0	0	0	0	0.38
37	1	0	0	0	0	0	0	0	0.26
38	0	0	0	1	0	0	0	0	0.00
39	0	0	0	0	0	0	0	0	0.00
40	0	0	0	0	0	0	0	0	0.00
41	0	0	0	0	0	0	0	0	0.25
42	0	0	0	1	0	0	0	0	4.15
43	0	0	0	1	0	0	0	0	0.00
44	0	0	0	0	0	0	0	0	0.00
45	0	0	0	0	0	0	0	0	0.00
46	0	0	0	1	0	0	0	0	0.00
47	0	0	0	1	0	0	0	0	0.00
48	0	0	0	0	0	0	0	0	0.00
49	0	0	0	0	0	0	0	0	0.00
50	0	0	0	0	0	0	0	0	0.00
51	0	1	0	1	0	0	0	0	2.11
52	0	0	0	1	0	0	0	0	0.00
53	0	0	0	0	0	0	0	0	0.16
54	0	0	0	0	0	0	0	0	0.00
55	0	0	0	1	0	0	0	0	0.00
56	0	0	0	0	0	0	0	0	0.00
57	0	0	0	0	0	0	0	0	0.31
58	0	0	0	1	0	0	0	0	0.00
59	0	0	0	1	0	0	0	0	0.00
60	0	0	0	1	0	0	0	0	11.97

1									
2									
3	0	0	0	1	0	0	0	0	0.00
4	0	0	0	0	0	0	0	0	0.00
5	0	0	0	1	0	0	0	0	0.00
6	0	0	0	1	0	0	0	0	0.00
7	0	0	0	0	0	0	0	0	0.38
8	0	0	0	1	0	0	0	0	3.45
9	0	0	0	0	0	0	0	0	0.00
10	0	0	0	1	0	0	0	0	1.81
11	0	0	0	1	0	0	0	0	0.00
12	0	0	0	0	0	0	0	0	12.70
13	0	0	0	0	0	0	0	0	0.00
14	0	0	0	0	0	0	0	0	0.00
15	0	0	0	0	0	0	0	0	0.16
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	0	0	0	0	0	0.49
18	0	0	0	1	0	0	0	0	0.08
19	0	0	0	1	0	0	0	0	0.01
20	0	0	0	1	0	0	0	0	0.00
21	0	0	0	0	0	0	0	0	0.00
22	1	0	0	0	0	0	0	0	0.00
23	0	1	0	0	0	0	0	0	0.18
24	0	0	0	1	0	0	0	0	0.02
25	0	0	0	1	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.74
27	0	1	0	1	0	0	0	0	1.53
28	0	0	0	1	0	1	0	0	11.97
29	0	1	0	1	0	0	0	0	2.59
30	0	0	0	0	0	0	0	0	0.00
31	0	0	0	0	0	0	0	0	0.00
32	0	0	0	0	0	0	0	0	0.00
33	0	0	0	1	0	0	0	0	0.00
34	0	0	0	1	0	0	0	0	5.37
35	0	0	0	0	0	0	0	0	0.00
36	0	1	0	0	0	0	0	0	0.00
37	0	0	0	1	0	0	0	0	3.84
38	0	0	0	1	0	0	0	0	0.00
39	0	0	0	0	0	0	0	0	0.00
40	0	0	0	0	0	0	0	0	0.00
41	0	0	0	0	0	0	0	0	0.09
42	0	0	0	1	0	1	0	0	0.38
43	0	0	0	1	0	0	0	0	0.05
44	0	0	0	1	0	0	0	0	1.64
45	0	0	0	0	0	0	0	0	3.15
46	0	1	0	1	0	0	0	0	2.95
47	0	0	0	0	0	0	0	0	0.16
48	0	0	0	0	0	0	0	0	0.10
49	0	0	0	1	0	0	0	0	0.00
50	0	0	0	1	0	0	0	0	0.00
51	0	0	0	0	0	0	0	0	0.00
52	0	0	0	0	0	0	0	0	0.00
53	1	1	0	1	0	1	0	0	5.85
54	0	0	0	0	0	0	0	0	3.19
55	0	0	0	1	0	0	0	0	3.55
56	0	0	0	0	0	0	0	0	0.31
57	0	0	0	0	0	0	0	0	0.00
58	0	0	0	0	0	0	0	0	0.14
59	0	0	0	1	0	0	0	0	0.00
60	0	0	0	0	0	0	0	0	0.09

1									
2									
3	0	0	0	0	0	0	0	0	11.80
4	0	0	0	1	0	0	0	0	0.00
5	0	0	0	1	0	0	0	0	0.82
6	0	0	0	1	0	0	0	0	0.29
7	0	0	0	1	0	0	0	0	0.29
8	0	0	0	1	0	0	0	0	0.00
9	0	0	0	1	0	0	0	0	0.19
10	0	0	0	0	0	0	0	0	0.00
11	0	0	0	0	0	0	0	0	0.00
12	0	0	0	0	0	0	0	0	0.00
13	0	0	0	0	0	0	0	0	0.05
14	0	0	0	1	0	0	0	0	0.51
15	0	0	0	0	0	0	0	0	0.13
16	0	0	0	1	0	0	0	0	0.55
17	0	0	0	1	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	0.12
19	0	0	0	1	0	0	0	0	0.00
20	0	0	0	1	0	0	0	0	0.10
21	0	0	0	0	0	0	0	0	0.00
22	0	0	0	1	0	0	0	0	0.00
23	0	0	0	1	0	0	0	0	0.00
24	0	0	0	1	0	0	0	0	0.12
25	0	0	0	1	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.16
27	0	0	0	0	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	0.00
29	0	0	0	1	0	0	0	0	0.77
30	0	0	0	1	0	0	0	0	2.30
31	0	0	0	1	0	0	0	0	4.99
32	0	0	0	1	0	0	0	0	0.00
33	0	0	0	0	0	0	0	0	0.00
34	0	0	0	0	0	0	0	0	1.11
35	0	0	0	1	0	0	0	0	3.84
36	1	1	0	1	0	0	0	0	0.14
37	0	1	0	0	0	0	0	1	0.00
38	0	0	0	1	0	0	0	0	2.38
39	0	0	0	1	0	0	0	0	0.00
40	0	0	0	1	0	0	0	0	0.00
41	0	1	0	0	0	0	0	0	0.00
42	0	0	0	1	0	0	0	0	0.00
43	0	0	0	1	0	0	0	0	0.41
44	0	0	0	1	0	0	0	0	0.07
45	0	0	0	1	0	0	0	0	0.00
46	0	0	0	1	0	0	0	0	2.54
47	0	0	0	1	0	0	0	0	0.00
48	0	0	0	1	0	0	0	0	0.00
49	0	0	0	1	0	0	0	0	0.00
50	0	0	0	1	0	0	0	0	0.00
51	0	0	0	1	0	0	0	0	0.00
52	0	0	0	1	0	0	0	0	0.63
53	0	1	0	0	0	0	0	0	0.00
54	0	0	0	0	0	0	0	0	0.14
55	0	0	0	1	0	0	0	0	0.00
56	0	0	0	0	0	0	0	0	0.00
57	0	0	0	1	0	0	0	0	3.07
58	0	0	0	0	0	1	0	0	0.00
59	0	0	0	1	0	0	0	0	0.00
60	0	0	0	1	0	0	0	0	0.30

1									
2									
3	0	0	0	1	0	0	0	0	0.08
4	0	0	0	1	0	0	0	0	0.05
5	0	0	0	1	0	0	0	0	2.50
6	0	0	0	1	0	0	0	0	0.00
7	0	0	0	1	0	0	0	0	0.00
8	0	0	0	1	0	0	0	0	0.00
9	0	0	0	1	0	0	0	0	4.62
10	0	0	0	1	0	0	0	0	0.00
11	1	1	1	1	0	0	0	0	3.74
12	0	0	0	1	0	0	0	0	2.30
13	0	0	0	1	0	0	0	0	2.27
14	0	0	0	1	0	0	0	0	1.08
15	0	0	0	0	0	0	0	0	0.00
16	1	1	0	1	0	0	0	0	1.89
17	0	0	0	0	0	0	0	0	0.96
18	0	0	0	1	0	0	0	0	0.00
19	0	0	0	1	0	0	0	0	2.53
20	0	0	0	1	0	0	0	0	0.00
21	0	0	0	0	0	0	0	0	0.08
22	0	0	0	1	0	0	0	0	1.34
23	0	0	0	1	0	0	0	0	1.53
24	0	0	0	0	0	0	0	0	4.71
25	0	0	0	0	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.00
27	0	0	0	1	0	0	0	0	0.09
28	0	0	0	1	0	0	0	0	3.67
29	0	0	0	0	0	0	0	0	15.12
30	0	0	0	0	0	0	0	0	0.00
31	0	0	0	0	0	0	0	0	0.00
32	1	1	0	1	0	0	0	0	0.00
33	0	0	0	1	0	0	0	0	0.58
34	0	0	0	1	0	0	0	0	0.14
35	0	1	0	1	0	0	0	0	2.30
36	0	1	0	1	0	0	0	0	0.38
37	0	0	0	1	0	0	0	0	0.37
38	0	0	0	1	0	0	0	0	0.38
39	0	0	0	1	0	0	0	0	0.00
40	0	0	0	1	0	0	0	0	0.77
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	1	0	0	0	0	9.64
43	0	0	0	1	0	0	0	0	0.00
44	0	0	0	1	0	0	0	0	3.19
45	0	0	0	1	0	0	0	0	9.27
46	0	0	0	1	0	0	0	0	5.12
47	0	0	0	0	0	0	0	0	0.00
48	0	0	0	1	0	0	0	0	0.14
49	0	0	0	0	0	0	0	0	0.00
50	0	0	0	1	0	0	0	0	1.53
51	0	0	0	1	0	0	0	0	0.00
52	0	0	0	1	0	0	0	0	2.21
53	0	0	0	1	0	0	0	0	0.78
54	0	1	0	1	0	1	1	0	12.21
55	0	0	0	0	0	0	0	0	0.34
56	0	0	0	1	0	0	0	0	1.34
57	0	0	0	1	0	0	0	0	0.00
58	0	0	0	1	0	0	0	0	2.28
59	0	0	0	0	0	0	0	0	0.00
60	0	0	0	0	0	0	0	0	0.00

1									
2									
3	0	0	0	0	0	0	0	0	0.00
4	0	0	0	1	0	0	0	0	0.00
5	0	0	0	1	0	0	0	0	0.00
6	0	0	0	0	0	0	0	0	0.00
7	0	0	0	1	0	0	0	0	17.01
8	0	0	0	0	0	0	0	0	0.00
9	0	0	0	1	0	0	0	0	0.00
10	0	0	0	0	1	1	0	0	0.77
11	0	0	0	0	0	0	0	0	0.00
12	0	0	0	0	0	0	0	0	0.00
13	0	0	0	1	0	0	0	0	4.60
14	0	0	0	0	0	0	0	0	0.05
15	0	0	0	1	0	0	0	0	0.00
16	0	0	0	0	0	0	0	0	0.00
17	0	0	0	0	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	5.95
19	0	0	0	0	0	0	0	0	0.00
20	0	0	0	1	0	1	0	0	1.41
21	1	0	0	0	0	0	0	0	3.41
22	1	1	0	1	0	0	0	0	0.43
23	0	0	0	0	0	0	0	0	0.09
24	0	0	0	0	0	0	0	0	0.00
25	0	0	0	0	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.32
27	0	0	0	1	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	0.73
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	0	0	0	0	0	2.88
31	0	0	0	0	0	0	0	0	1.23
32	0	0	0	1	0	0	0	0	1.03
33	0	0	0	1	0	0	0	0	1.34
34	0	0	0	0	0	0	0	0	0.00
35	0	0	0	0	0	0	0	0	0.00
36	0	0	0	1	0	0	0	0	0.00
37	0	0	0	1	0	0	0	0	0.16
38	0	0	0	0	0	0	0	0	0.06
39	0	0	0	0	0	0	0	0	6.30
40	0	0	0	1	0	0	0	0	1.73
41	0	0	0	1	0	0	0	0	0.00
42	0	0	0	0	0	1	0	0	1.77
43	0	0	0	1	0	0	0	0	0.12
44	0	0	0	1	0	0	0	0	0.10
45	0	0	0	0	0	0	0	0	0.00
46	0	0	0	0	0	0	0	0	5.05
47	0	0	0	1	0	1	0	0	0.77
48	0	0	0	1	0	0	0	0	0.00
49	0	0	0	0	0	0	0	0	1.85
50	0	0	0	0	0	0	0	0	0.00
51	0	0	0	1	0	0	0	0	0.00
52	0	0	0	1	0	0	0	0	0.00
53	0	0	0	0	0	0	0	0	0.12
54	0	0	0	1	0	0	0	0	0.12
55	0	0	0	1	0	0	0	0	1.12
56	0	0	0	1	0	0	0	0	0.90
57	0	0	1	1	0	0	0	0	0.00
58	0	0	0	1	0	0	0	0	0.00
59	0	0	0	1	0	0	0	0	0.00
60	0	0	0	1	0	0	0	0	0.41



1									
2									
3	0	0	0	1	0	0	0	0	1.25
4	0	1	0	1	0	0	0	0	0.00
5	0	1	0	1	0	0	0	0	0.58
6	0	0	0	1	0	0	0	0	0.00
7	0	0	0	1	0	0	0	0	2.68
8	0	0	0	1	0	0	0	0	0.00
9	0	0	0	1	0	0	0	0	0.00
10	1	0	0	1	0	0	0	1	5.11
11	0	0	0	0	0	0	0	0	4.30
12	1	0	0	0	0	0	0	1	4.75
13	0	0	0	0	0	0	0	0	0.00
14	0	0	0	0	0	0	0	0	0.00
15	0	0	0	0	0	0	0	0	0.29
16	0	0	0	1	0	0	0	0	0.00
17	0	0	0	1	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	0.00
19	0	0	0	1	0	0	0	0	0.05
20	0	0	0	1	0	0	0	0	0.38
21	0	0	0	0	0	0	0	0	0.00
22	0	0	0	0	0	0	0	0	0.00
23	0	0	0	0	0	0	0	0	0.00
24	0	0	0	1	0	0	0	0	0.00
25	0	0	0	1	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.00
27	1	0	0	1	0	0	0	0	0.31
28	0	0	0	1	0	0	0	0	0.00
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	1	0	0	0	0	0.00
31	0	0	0	0	0	0	0	0	0.00
32	0	0	0	1	0	1	0	0	3.55
33	0	0	0	1	0	0	0	0	2.30
34	0	0	0	1	0	0	0	0	0.58
35	0	0	0	1	0	0	0	0	0.00
36	0	0	0	0	0	0	0	0	0.00
37	0	0	0	1	0	0	0	0	0.00
38	0	0	0	1	0	0	0	0	0.00
39	0	0	0	1	0	0	0	0	8.11
40	0	0	0	1	0	0	0	0	0.28
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	1	0	1	0	0	1.01
43	0	0	0	0	0	0	0	0	0.00
44	0	0	0	1	0	0	0	0	0.00
45	0	0	0	0	0	0	0	0	0.00
46	0	0	0	0	0	0	0	0	0.00
47	0	0	0	1	0	0	0	0	0.00
48	0	0	0	1	0	0	0	0	0.00
49	0	0	0	0	0	0	0	0	0.00
50	0	0	0	0	0	0	0	0	0.00
51	0	0	0	0	0	0	0	0	0.00
52	0	0	0	0	0	0	0	0	0.00
53	0	0	0	1	0	0	0	0	0.67
54	0	0	0	1	0	1	0	0	6.73
55	0	0	0	1	0	0	0	0	0.00
56	0	0	0	1	0	1	0	0	0.29
57	0	0	0	0	0	0	0	0	0.00
58	0	0	0	1	0	0	0	0	0.00
59	0	0	0	1	0	0	0	0	0.99
60	0	0	0	1	0	0	0	0	4.95

1									
2									
3	0	0	0	1	0	0	0	0	0.00
4	0	0	0	0	0	0	0	0	0.00
5	0	0	0	1	0	0	0	0	0.00
6	0	0	0	0	0	0	0	0	0.16
7	0	0	0	1	0	0	0	0	0.00
8	0	0	0	1	0	0	0	0	8.48
9	0	1	0	0	0	0	0	0	4.63
10	0	0	0	0	0	0	0	0	0.10
11	0	0	0	1	0	0	0	0	4.44
12	0	1	0	1	0	0	0	0	2.78
13	0	0	0	1	0	0	0	0	1.07
14	0	0	0	1	0	1	0	0	0.00
15	0	0	0	1	0	0	0	0	0.00
16	0	0	0	1	0	0	0	0	0.58
17	0	0	0	0	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	0.00
19	0	0	0	0	0	0	0	0	0.11
20	0	0	0	1	0	0	0	0	0.27
21	1	0	0	0	0	0	0	0	0.00
22	0	0	0	0	0	0	0	0	0.00
23	0	0	0	0	0	0	0	0	0.00
24	1	1	0	1	0	0	0	0	1.44
25	0	0	0	1	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.00
27	0	0	0	1	0	0	0	0	0.38
28	0	0	0	0	0	0	0	0	0.82
29	0	0	0	1	0	1	0	0	3.64
30	0	0	0	0	0	0	0	0	0.62
31	0	0	0	0	0	0	0	0	0.00
32	0	0	0	0	0	0	0	0	0.06
33	0	0	0	0	0	0	0	0	5.37
34	0	0	0	0	0	0	0	0	0.25
35	0	0	0	1	0	0	0	0	1.15
36	0	0	0	0	0	0	0	0	0.00
37	0	0	0	0	0	0	0	0	0.00
38	0	0	0	0	0	0	0	0	0.00
39	0	1	0	1	0	0	0	0	0.00
40	0	0	0	0	0	0	0	0	0.00
41	0	0	0	0	0	0	0	0	0.00
42	0	0	0	1	0	0	0	0	1.53
43	0	0	0	1	0	0	0	0	1.78
44	0	0	0	1	0	0	0	0	0.00
45	0	0	0	1	0	0	0	0	0.00
46	0	1	0	1	0	0	0	0	0.38
47	0	0	0	1	0	0	0	0	1.26
48	1	0	0	1	0	0	0	0	5.32
49	0	0	0	0	0	0	0	0	0.00
50	0	0	0	1	0	0	0	0	0.00
51	0	0	0	1	0	0	0	0	0.00
52	0	0	0	0	0	0	0	0	0.00
53	0	0	0	0	0	0	0	0	0.00
54	0	0	0	1	0	1	0	0	14.40
55	0	0	0	0	0	0	0	0	0.00
56	0	0	0	0	0	0	0	0	0.00
57	0	0	0	0	0	0	0	0	0.99
58	0	0	0	1	0	0	0	0	0.12
59	0	0	0	1	0	0	0	0	1.40
60	1	0	0	1	0	0	0	1	7.00

1									
2									
3	0	0	0	1	0	0	0	0	0.96
4	0	0	0	1	0	0	0	0	0.00
5	0	0	0	1	0	0	0	0	4.01
6	0	0	0	0	0	0	0	0	0.00
7	0	0	0	1	0	0	0	0	0.77
8	0	0	0	0	0	0	0	0	0.00
9	0	0	0	1	0	0	0	0	0.00
10	0	0	0	1	0	0	0	0	0.23
11	0	0	0	1	0	0	0	0	1.88
12	0	0	0	1	0	0	0	0	0.00
13	0	0	0	1	0	0	0	0	0.00
14	0	0	0	1	0	0	0	0	0.33
15	0	0	0	1	0	0	0	0	1.47
16	0	0	0	1	0	0	0	0	0.12
17	0	0	0	0	0	0	0	0	0.00
18	0	0	0	1	0	0	0	0	0.16
19	0	0	0	1	0	0	0	0	0.29
20	0	0	0	0	0	0	0	0	0.08
21	0	0	0	0	0	0	0	0	0.08
22	1	1	0	1	0	1	0	0	10.36
23	0	0	0	1	0	0	0	0	0.00
24	0	0	0	1	0	0	0	0	0.17
25	0	0	0	1	0	0	0	0	0.00
26	0	0	0	1	0	0	0	0	0.00
27	0	0	0	1	0	0	0	0	0.00
28	0	0	0	1	0	0	0	0	3.32
29	0	0	0	0	0	0	0	0	0.00
30	0	0	0	0	0	0	0	0	0.00
31	0	0	0	1	0	0	0	0	5.37
32	0	0	0	1	0	0	0	0	0.00
33	0	0	0	0	0	0	0	0	0.67
34	0	0	0	1	0	1	0	0	1.52
35	0	0	0	1	0	0	0	0	0.12
36	0	0	0	0	0	0	0	0	0.19
37	0	0	0	0	0	0	0	0	3.16
38	0	0	0	1	0	0	0	0	0.00
39	0	0	0	1	0	0	0	0	0.12
40	0	0	0	1	0	1	0	0	5.18
41	0	1	0	1	0	1	0	0	4.60
42	0	0	0	1	0	0	0	0	4.34
43	0	0	0	0	0	0	0	0	0.00
44	0	0	0	1	0	0	0	0	1.92
45	0	0	0	0	0	1	0	0	0.00
46	0	0	0	1	0	0	0	0	0.38
47	0	0	0	1	0	0	0	0	1.56
48	0	0	0	1	0	0	0	0	0.52
49	0	0	0	0	0	0	0	0	0.00
50	0	0	1	1	0	0	0	0	0.00
51	0	0	0	1	0	0	0	0	2.29
52	0	1	0	1	0	0	0	0	0.18
53	0	0	0	0	0	0	0	0	1.93
54	0	0	0	1	0	0	0	0	0.00
55	1	0	0	1	0	0	0	0	0.08
56	0	0	0	1	0	0	0	0	0.16
57	0	0	0	1	0	0	0	0	0.00
58	0	0	0	1	0	0	0	0	0.00
59	0	0	0	1	0	0	0	0	0.00
60	0	1	0	1	0	0	0	0	1.67

1									
2									
3	1	0	0	0	0	0	0	0	0.00
4	0	0	0	1	0	0	0	0	1.53
5	0	0	0	1	0	0	0	0	0.12
6	0	0	0	1	0	0	0	0	17.82
7	0	0	0	0	0	0	1	0	8.84
8	0	0	0	1	0	0	0	0	3.84
9									

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

For peer review only

	Steroid ,Y/IMMF	Immunosup	CO-1Y	CO-2Y	PM25-1Y	PM2.5-2Y	PM10-1Y	PM10-2Y	
1									
2									
3									
4	1	0	1	0.46	0.46	2.27	2.41	3.94	4.28
5	0	0	0	0.85	0.87	3.00	3.16	4.57	4.81
6	1	0	0	0.37	0.37	4.02	4.02	6.54	6.41
7	1	0	1	0.45	0.46	2.77	3.00	4.85	5.19
8	1	0	1	0.61	0.63	3.76	3.83	6.71	6.59
9	1	0	1	0.35	0.36	3.22	3.53	6.70	7.03
10	1	0	1	0.54	0.55	2.48	2.50	5.01	5.08
11	1	0	1	0.52	0.53	2.32	2.55	3.96	4.46
12	0	0	0	0.44	0.44	4.05	4.06	7.13	7.16
13	1	0	0	0.58	0.59	4.22	4.40	6.50	7.01
14	0	0	0	0.64	0.63	2.38	2.50	5.57	5.63
15	0	1	1	0.34	0.33	3.28	3.33	6.06	6.04
16	1	0	0	0.56	0.56	2.65	2.65	4.10	4.11
17	1	0	0	0.65	0.67	4.48	4.58	8.12	8.34
18	1	0	1	0.41	0.41	2.53	2.53	4.62	4.64
19	1	0	0	0.52	0.52	2.84	2.84	4.62	4.62
20	1	1	1	0.46	0.46	3.77	3.77	5.74	5.74
21	1	0	0	0.39	0.39	4.40	4.40	6.72	6.72
22	1	0	0	0.84	0.86	2.76	2.98	4.56	4.90
23	1	0	0	0.53	0.53	3.64	3.64	5.82	5.83
24	1	0	1	0.45	0.47	3.50	3.66	5.31	5.56
25	1	0	1	0.40	0.40	4.41	4.42	7.13	7.14
26	1	0	0	0.39	0.39	3.20	3.23	5.21	5.27
27	1	0	1	0.42	0.43	4.46	4.48	7.38	7.43
28	1	0	1	0.62	0.63	3.73	4.12	6.64	7.02
29	1	0	0	0.39	0.39	1.71	1.71	3.00	3.01
30	1	0	0	0.44	0.44	3.93	3.95	6.57	6.59
31	0	0	0	0.50	0.54	3.19	3.56	5.12	5.67
32	1	0	0	0.38	0.38	3.42	3.47	7.70	7.40
33	1	0	1	0.55	0.55	2.83	2.83	5.52	5.54
34	1	0	0	0.45	0.46	2.20	2.41	3.87	4.32
35	1	0	0	0.36	0.37	2.03	2.07	3.51	3.62
36	1	0	1	0.39	0.39	3.58	3.58	5.84	5.84
37	1	0	0	0.38	0.38	3.06	3.06	5.02	5.02
38	1	0	1	0.54	0.56	2.35	2.67	3.75	4.26
39	0	0	0	0.35	0.35	3.07	3.39	5.32	5.79
40	0	0	0	0.85	0.86	3.05	3.15	4.65	4.79
41	1	0	0	0.59	0.57	2.84	2.60	4.42	4.08
42	1	0	0	0.36	0.36	2.87	3.21	4.81	5.28
43	1	0	0	0.52	0.52	2.82	2.81	4.57	4.58
44	1	0	1	0.41	0.42	4.22	4.40	7.21	7.51
45	1	0	0	0.35	0.34	3.57	3.75	5.99	6.31
46	1	0	0	0.40	0.40	3.83	3.84	7.09	7.10
47	1	1	1	0.37	0.37	3.83	3.83	7.59	7.60
48	0	0	0	0.41	0.41	2.49	2.49	4.52	4.57
49	1	0	0	1.54	1.54	3.47	3.47	5.35	5.37
50	0	0	0	0.62	0.62	3.06	3.05	5.08	5.08
51	1	0	0	0.40	0.40	3.13	3.13	5.01	5.01
52	1	0	0	0.58	0.56	2.63	2.50	4.28	4.06
53	0	0	0	0.63	0.63	2.55	2.62	5.38	5.55
54	1	0	0	0.44	0.45	3.90	4.15	6.66	7.01
55	1	0	0	0.58	0.59	4.18	4.37	6.43	6.93
56	1	1	1	0.34	0.33	3.30	3.29	6.73	6.25
57	0	0	0	0.62	0.62	2.67	2.67	5.78	5.78
58	1	0	1	0.45	0.45	3.32	3.55	6.42	6.63

1									
2									
3	0	0	0	0.36	0.36	2.06	2.07	3.79	3.81
4	1	1	1	0.37	0.37	3.84	3.85	7.45	7.47
5	1	0	1	0.58	0.62	4.20	4.77	6.83	7.71
6	0	0	0	0.38	0.40	4.15	4.35	6.40	6.68
7	1	0	0	0.65	0.65	4.53	4.53	8.25	8.25
8	1	0	0	0.39	0.39	3.19	3.51	6.45	6.76
9	1	0	0	0.40	0.43	2.97	3.31	4.68	5.23
10	1	0	0	0.46	0.46	3.77	3.77	5.74	5.75
11	1	0	1	0.40	0.40	2.53	2.83	4.12	4.56
12	0	0	0	0.33	0.32	3.22	3.37	5.85	6.07
13	1	0	1	0.60	0.61	2.46	2.75	4.06	4.40
14	1	0	0	0.40	0.40	3.06	3.08	4.83	4.90
15	1	0	0	0.50	0.50	3.21	3.35	5.39	5.71
16	1	0	0	0.63	0.63	2.38	2.53	4.93	5.27
17	1	0	0	0.60	0.60	4.59	4.59	7.53	7.54
18	1	0	1	0.39	0.39	4.38	4.40	6.70	6.72
19	1	0	1	0.40	0.40	4.03	4.38	6.68	7.14
20	1	0	0	0.46	0.49	3.08	3.35	4.93	5.35
21	0	0	0	0.55	0.55	2.60	2.60	5.24	5.24
22	1	0	0	0.41	0.40	3.13	3.01	5.34	5.15
23	1	0	1	0.60	0.61	2.62	2.75	4.49	4.61
24	1	0	0	1.47	1.50	3.02	3.25	5.02	5.19
25	1	0	0	0.50	0.53	2.35	2.61	3.87	4.29
26	1	0	0	0.29	0.30	3.25	3.38	5.40	5.73
27	1	0	1	0.62	0.62	3.06	3.06	5.09	5.09
28	1	0	0	0.53	0.54	4.21	4.21	7.79	7.80
29	1	0	0	0.54	0.55	2.24	2.44	3.65	3.86
30	0	0	0	0.38	0.38	2.99	3.27	4.70	5.09
31	1	0	0	0.68	0.65	2.50	2.45	5.53	5.43
32	1	0	0	0.33	0.34	1.80	1.99	3.05	3.22
33	1	0	1	0.43	0.43	3.27	3.53	6.53	6.73
34	1	1	1	0.85	0.86	2.77	2.90	4.73	4.81
35	1	0	0	0.38	0.38	2.13	2.13	3.71	3.71
36	1	0	0	0.36	0.36	2.92	3.26	5.14	5.58
37	1	0	0	0.55	0.55	2.57	2.57	5.18	5.20
38	0	0	0	0.43	0.43	3.78	3.82	6.91	6.98
39	1	0	0	0.40	0.39	3.69	4.03	5.95	6.31
40	1	0	0	0.60	0.61	4.58	4.60	7.50	7.56
41	0	0	0	0.61	0.62	2.94	2.97	4.83	4.90
42	1	1	1	0.44	0.44	2.49	2.49	4.29	4.30
43	1	0	1	0.60	0.61	2.47	2.75	4.08	4.39
44	1	0	0	0.46	0.46	3.75	3.76	5.71	5.73
45	1	0	1	0.59	0.59	3.80	4.21	6.76	7.08
46	0	0	0	0.42	0.42	3.62	3.62	5.65	5.65
47	1	0	0	0.49	0.50	2.71	2.96	5.24	5.48
48	1	0	0	0.95	0.95	3.35	3.35	5.12	5.12
49	1	0	0	0.56	0.56	2.65	2.65	4.10	4.10
50	1	0	0	0.60	0.60	4.58	4.60	7.51	7.55
51	0	0	0	1.44	1.48	2.83	3.10	5.40	5.57
52	1	0	1	0.50	0.50	3.71	4.01	6.94	7.17
53	1	0	1	0.37	0.37	3.49	3.49	5.71	5.72
54	0	0	1	0.35	0.37	1.75	1.93	3.07	3.32
55	1	0	1	0.84	0.85	2.79	2.99	4.39	4.63
56	1	0	0	0.42	0.45	3.24	3.51	5.08	5.48
57	1	0	0	0.54	0.54	2.30	2.44	4.18	4.69
58	1	0	0	0.45	0.46	2.68	2.95	4.83	5.16

1									
2									
3	1	0	0	0.56	0.56	2.84	2.84	4.46	4.51
4	1	1	1	0.44	0.45	4.59	4.66	7.28	7.43
5	1	0	1	0.62	0.62	3.00	2.99	4.95	4.97
6	1	0	0	0.47	0.46	3.32	3.25	5.31	5.13
7	1	0	0	0.41	0.43	2.98	3.06	5.07	5.19
8	1	0	0	0.63	0.63	2.63	2.63	5.50	5.54
9	0	0	0	0.95	0.95	3.36	3.36	5.13	5.13
10	1	0	1	0.47	0.46	3.25	3.18	5.26	5.12
11	1	0	0	0.38	0.38	2.81	2.86	4.61	4.71
12	1	0	0	0.36	0.37	1.76	1.93	3.08	3.31
13	0	0	0	0.52	0.53	3.57	3.61	5.61	5.67
14	0	0	0	0.84	0.85	2.79	2.99	4.39	4.63
15	1	0	1	0.41	0.43	2.98	3.30	4.89	5.33
16	1	0	0	0.42	0.42	3.62	3.62	5.64	5.64
17	1	0	1	0.41	0.40	2.55	2.82	4.17	4.53
18	0	0	0	0.54	0.55	3.48	3.55	6.15	6.22
19	1	0	1	0.48	0.48	2.47	2.47	5.45	5.46
20	1	0	1	0.45	0.46	4.44	4.44	7.56	7.56
21	1	0	1	0.40	0.40	3.12	3.12	4.96	4.99
22	1	0	0	0.94	0.96	2.99	3.25	4.63	4.99
23	1	0	1	0.35	0.35	3.12	3.43	5.43	5.89
24	1	0	0	0.37	0.37	2.52	2.80	4.14	4.60
25	1	0	0	0.52	0.52	3.63	3.63	5.76	5.76
26	1	0	0	0.48	0.48	2.48	2.48	5.47	5.47
27	1	1	1	0.59	0.60	2.60	2.81	4.22	4.53
28	1	0	1	0.41	0.41	2.55	2.88	4.02	4.49
29	1	0	1	0.87	0.89	2.91	3.13	4.71	5.09
30	1	0	0	1.48	1.50	3.06	3.13	5.23	5.10
31	1	0	0	0.54	0.56	3.40	3.45	5.57	5.65
32	1	0	0	0.63	0.64	3.81	4.17	7.40	7.82
33	1	0	0	0.58	0.59	4.17	4.37	6.43	6.92
34	1	0	1	0.37	0.37	3.79	3.84	7.03	7.11
35	0	0	0	0.52	0.53	2.32	2.53	3.81	4.10
36	1	0	1	0.51	0.53	3.06	3.28	5.12	5.42
37	1	0	0	0.41	0.40	3.68	3.98	6.49	6.67
38	0	0	0	0.84	0.85	2.79	2.85	4.50	4.46
39	1	0	1	0.52	0.53	4.53	4.60	7.24	7.37
40	1	0	0	0.44	0.44	4.60	4.66	7.30	7.42
41	1	0	0	0.58	0.59	4.21	4.40	6.49	7.01
42	1	0	1	1.44	1.48	2.84	3.10	5.42	5.57
43	1	0	0	0.53	0.53	3.63	3.64	5.81	5.82
44	1	0	0	0.53	0.53	4.21	4.21	7.79	7.80
45	1	0	1	0.40	0.39	3.69	4.02	5.95	6.30
46	1	0	0	0.52	0.56	4.16	4.69	6.82	7.63
47	1	0	1	0.44	0.44	4.65	4.66	7.38	7.41
48	1	0	1	0.38	0.39	4.32	4.38	6.63	6.72
49	1	0	0	0.43	0.47	4.53	5.05	7.19	7.99
50	1	0	0	0.46	0.46	3.76	3.77	5.73	5.74
51	1	0	1	0.87	0.87	3.20	3.19	5.22	5.23
52	1	0	0	0.40	0.40	3.13	3.13	5.01	5.01
53	1	0	1	0.46	0.46	3.77	3.77	5.74	5.74
54	1	0	1	0.45	0.46	4.35	4.50	7.40	7.67
55	1	0	1	0.65	0.67	4.46	4.59	8.08	8.37
56	1	0	0	0.57	0.58	3.84	4.24	6.80	7.07
57	0	0	0	0.46	0.46	2.26	2.41	3.94	4.28
58	0	0	0	0.62	0.62	3.05	3.05	4.75	4.75

1									
2									
3	1	0	1	0.42	0.41	2.82	2.70	4.51	4.29
4	1	0	1	0.60	0.61	2.62	2.84	4.35	4.71
5	1	0	0	0.34	0.34	1.86	1.83	3.44	3.39
6	1	0	0	1.51	1.52	3.35	3.35	5.71	5.73
7	1	0	0	1.51	1.52	3.32	3.33	5.66	5.70
8	1	0	0	0.54	0.54	2.28	2.44	4.18	4.71
9	1	0	0	1.00	1.03	2.54	2.79	4.62	4.86
10	1	0	0	0.55	0.55	2.60	2.60	5.25	5.25
11	0	0	0	0.38	0.39	2.98	3.01	4.63	4.74
12	1	0	0	0.54	0.54	2.77	2.77	4.43	4.43
13	1	0	0	0.62	0.62	3.04	3.04	4.74	4.74
14	1	0	1	1.00	1.00	3.02	3.02	5.13	5.13
15	1	0	0	1.01	1.04	2.50	2.80	4.49	4.85
16	0	0	0	0.37	0.38	3.30	3.54	7.32	7.46
17	0	0	0	0.27	0.27	3.24	3.29	5.05	5.19
18	1	0	0	0.52	0.53	3.15	3.37	5.19	5.61
19	0	0	0	0.45	0.46	3.67	3.72	5.55	5.66
20	1	1	1	0.42	0.42	3.93	3.96	6.39	6.43
21	1	0	0	0.53	0.54	2.28	2.44	4.18	4.71
22	1	0	0	0.60	0.61	4.58	4.61	7.49	7.56
23	1	0	0	0.30	0.30	2.77	3.02	5.23	5.39
24	0	0	0	0.60	0.61	2.47	2.75	4.07	4.40
25	1	0	1	0.61	0.62	2.97	2.98	4.88	4.93
26	1	1	1	0.52	0.52	2.84	2.84	4.62	4.62
27	1	0	1	0.36	0.39	1.84	2.05	3.10	3.46
28	1	0	0	0.62	0.62	3.06	3.06	5.09	5.09
29	1	0	1	0.62	0.63	3.81	3.96	7.43	7.52
30	0	0	0	0.32	0.32	3.47	3.70	5.98	6.34
31	0	0	0	0.44	0.44	4.66	4.66	7.40	7.40
32	1	0	1	0.88	0.88	3.20	3.20	5.24	5.24
33	1	0	1	0.55	0.56	2.64	2.64	4.09	4.10
34	1	0	0	0.38	0.39	3.70	3.82	7.42	7.72
35	1	0	0	0.84	0.86	2.77	2.98	4.56	4.89
36	1	0	0	0.46	0.46	3.74	4.05	7.26	7.52
37	0	0	0	0.67	0.65	2.52	2.53	5.56	5.47
38	0	0	0	0.60	0.60	2.65	2.65	4.35	4.36
39	1	0	0	1.43	1.45	3.11	2.98	5.75	5.52
40	1	0	0	0.61	0.62	3.69	4.03	6.77	6.97
41	1	0	0	0.40	0.43	3.48	4.05	5.50	6.30
42	1	0	0	0.45	0.47	3.43	3.63	5.37	5.67
43	0	0	0	0.45	0.47	4.29	4.47	7.37	7.67
44	1	1	1	0.50	0.51	2.32	2.54	3.91	4.24
45	0	0	0	0.86	0.88	2.81	3.06	4.60	4.99
46	0	0	1	0.50	0.50	3.43	3.43	5.76	5.76
47	1	0	1	0.52	0.55	2.38	2.63	3.76	4.20
48	1	0	1	0.40	0.40	3.21	3.50	6.66	6.84
49	1	0	1	0.86	0.86	3.25	3.25	4.99	5.00
50	0	0	0	0.46	0.46	3.70	3.73	5.60	5.68
51	1	0	0	0.49	0.50	2.73	2.96	5.29	5.48
52	1	0	0	0.29	0.29	3.34	3.35	5.66	5.69
53	0	0	0	0.35	0.36	1.79	1.96	3.35	3.59
54	1	0	1	0.45	0.47	3.21	3.60	5.13	5.68
55	1	0	1	0.49	0.49	2.26	2.47	3.76	4.10
56	1	1	1	0.51	0.52	4.20	3.99	6.55	6.82
57	1	0	0	0.64	0.64	2.97	2.95	4.64	4.65
58	1	0	1	0.35	0.35	1.50	1.51	3.42	3.45



1									
2									
3	1	0	1	0.95	0.95	3.34	3.33	5.09	5.10
4	1	0	0	0.34	0.34	3.86	3.88	6.89	6.94
5	1	0	0	0.83	0.85	2.79	3.02	4.34	4.66
6	1	1	1	0.43	0.43	2.29	2.29	3.58	3.58
7	1	0	0	0.44	0.42	3.22	3.10	5.18	4.93
8	1	0	0	0.84	0.85	2.79	3.00	4.37	4.64
9	1	0	0	0.63	0.64	3.81	4.17	7.40	7.82
10	1	0	1	1.48	1.50	3.04	3.18	5.17	5.13
11	1	1	1	0.49	0.49	2.23	2.27	5.49	5.36
12	0	0	0	0.44	0.44	4.65	4.66	7.39	7.40
13	1	0	0	0.43	0.43	3.81	3.82	6.96	6.97
14	0	0	0	0.43	0.45	4.50	4.65	7.16	7.43
15	1	0	1	0.38	0.38	3.12	3.12	5.05	5.05
16	1	0	0	0.46	0.46	3.62	3.63	5.77	5.77
17	0	0	0	0.63	0.64	3.79	4.15	6.54	7.04
18	1	0	1	0.45	0.46	3.77	3.81	6.81	6.88
19	1	0	0	0.40	0.42	2.21	2.43	4.05	4.46
20	1	0	0	0.84	0.86	2.76	2.98	4.55	4.90
21	0	0	0	0.40	0.39	3.69	4.04	5.95	6.33
22	1	0	1	0.44	0.45	4.51	4.52	7.77	7.79
23	1	0	0	0.39	0.39	4.40	4.40	6.72	6.72
24	1	0	0	0.34	0.34	3.02	3.01	4.65	4.73
25	1	0	0	0.42	0.45	3.90	4.48	6.55	7.31
26	1	0	0	0.43	0.43	3.81	4.23	6.76	7.08
27	0	0	0	0.39	0.40	4.03	4.12	7.02	7.17
28	1	0	1	0.51	0.51	2.33	2.48	4.01	4.16
29	1	0	0	0.62	0.62	3.05	3.04	5.06	5.07
30	1	0	1	0.48	0.48	2.93	2.98	5.35	5.29
31	0	0	0	0.61	0.62	2.95	2.95	4.53	4.59
32	1	0	0	0.84	0.86	2.77	2.98	4.57	4.89
33	1	0	0	0.44	0.44	4.66	4.66	7.40	7.40
34	1	0	1	0.41	0.42	3.92	4.11	6.58	6.73
35	1	1	1	0.34	0.35	1.69	1.87	3.27	3.51
36	1	0	0	0.40	0.40	2.56	2.84	4.35	4.78
37	1	0	1	0.36	0.35	3.40	3.38	7.58	7.08
38	0	0	0	0.38	0.38	3.42	3.47	7.72	7.40
39	0	0	0	0.40	0.41	2.20	2.26	3.30	3.39
40	1	0	1	0.33	0.35	1.93	2.01	3.51	3.68
41	1	0	0	0.56	0.56	2.47	2.65	5.02	5.26
42	0	0	0	0.54	0.54	2.28	2.44	4.18	4.71
43	1	0	1	0.43	0.43	3.03	3.25	5.07	5.28
44	1	0	1	0.43	0.43	4.13	4.13	7.34	7.35
45	1	0	1	0.42	0.42	3.27	3.54	6.49	6.73
46	0	0	0	0.29	0.29	2.80	3.12	5.12	5.48
47	1	1	1	0.61	0.62	2.98	2.97	4.58	4.62
48	1	0	1	0.87	0.87	3.12	3.12	5.04	5.10
49	1	0	0	0.49	0.50	3.13	3.31	5.12	5.32
50	1	0	1	0.41	0.41	4.42	4.44	6.73	6.76
51	1	0	0	0.49	0.52	3.29	3.64	5.48	5.97
52	0	0	0	0.44	0.44	4.65	4.66	7.39	7.40
53	1	0	1	0.95	0.95	3.35	3.35	5.11	5.12
54	1	0	0	0.93	0.95	2.91	3.18	4.54	4.88
55	1	0	0	0.37	0.37	3.81	3.84	7.40	7.47
56	1	0	0	0.41	0.41	3.81	3.83	7.04	7.07
57	0	0	0	0.55	0.55	2.85	2.85	5.57	5.57
58	1	0	1	0.52	0.53	3.81	4.01	7.11	7.45

1									
2									
3	1	0	0	0.94	0.94	2.90	3.08	4.56	4.75
4	1	0	0	0.42	0.40	3.24	3.15	5.45	5.30
5	1	0	0	0.43	0.43	4.13	4.14	7.34	7.35
6	0	0	1	0.40	0.40	3.74	3.70	5.46	5.64
7	1	0	1	0.43	0.43	2.52	2.52	4.13	4.14
8	1	0	0	0.37	0.37	3.76	3.84	7.32	7.46
9	0	0	0	0.51	0.53	3.04	3.28	5.10	5.42
10	1	0	0	0.49	0.49	2.31	2.25	5.62	5.35
11	1	0	0	0.52	0.53	3.83	4.00	7.07	7.35
12	1	0	0	0.40	0.41	2.11	2.35	3.77	4.21
13	0	0	0	0.41	0.41	1.80	2.01	2.89	3.12
14	1	0	1	0.44	0.44	3.34	3.52	6.52	6.62
15	1	0	0	0.44	0.44	3.79	3.81	6.89	6.93
16	1	0	0	0.19	0.19	1.68	1.67	3.12	3.00
17	1	0	1	0.49	0.51	3.16	3.40	5.06	5.44
18	0	0	0	0.86	0.87	3.08	3.11	4.96	5.06
19	0	0	0	0.44	0.44	3.46	3.45	6.70	6.57
20	1	0	0	1.44	1.46	3.01	3.01	5.73	5.53
21	1	0	1	0.60	0.62	2.60	2.86	4.29	4.72
22	0	0	1	0.62	0.62	3.01	3.01	4.98	5.00
23	1	0	0	0.31	0.31	3.76	3.76	6.66	6.67
24	1	0	1	0.52	0.53	2.33	2.48	3.90	4.04
25	1	0	0	0.29	0.29	3.35	3.38	5.63	5.70
26	1	0	0	0.38	0.38	3.83	3.84	7.73	7.74
27	1	0	1	1.01	1.03	2.52	2.79	4.56	4.86
28	1	0	1	0.52	0.53	2.33	2.50	3.87	4.06
29	1	0	0	1.00	1.00	3.00	3.00	5.09	5.10
30	1	0	1	0.44	0.45	3.74	4.00	6.83	7.06
31	1	0	1	0.39	0.40	4.11	4.13	7.42	7.48
32	1	0	1	0.40	0.40	4.40	4.40	6.68	6.69
33	0	0	0	0.29	0.30	3.31	3.56	5.87	6.35
34	1	0	1	0.93	0.94	2.90	3.12	4.48	4.80
35	1	0	1	0.93	0.94	2.90	3.12	4.49	4.79
36	1	0	0	1.47	1.50	3.02	3.25	5.02	5.19
37	1	0	0	0.41	0.40	3.20	3.08	4.22	4.14
38	1	0	0	0.39	0.39	4.39	4.40	6.71	6.72
39	1	0	1	0.48	0.49	3.56	3.60	5.71	5.76
40	1	0	0	0.55	0.55	2.46	2.66	4.99	5.28
41	0	0	0	0.57	0.57	2.91	2.91	4.64	4.64
42	0	0	0	0.83	0.85	2.79	3.02	4.34	4.66
43	1	0	1	0.47	0.50	3.08	3.36	4.97	5.36
44	1	0	1	0.94	0.96	3.05	3.26	4.69	4.99
45	1	0	1	0.34	0.35	1.79	1.96	3.44	3.70
46	1	0	1	0.56	0.57	2.71	2.77	4.21	4.39
47	1	0	0	0.50	0.50	2.60	2.63	4.31	4.35
48	1	0	1	0.55	0.55	3.64	3.65	5.91	5.93
49	1	0	1	0.38	0.40	3.22	3.76	6.34	7.13
50	1	0	1	0.83	0.85	2.79	3.02	4.34	4.66
51	1	1	1	0.47	0.50	3.09	3.38	4.94	5.42
52	0	0	0	0.56	0.56	2.90	2.90	4.62	4.63
53	1	0	0	0.55	0.55	2.84	2.84	5.55	5.56
54	1	0	0	0.88	0.88	3.20	3.20	5.24	5.25
55	1	0	1	0.52	0.52	2.46	2.40	3.96	3.85
56	0	0	0	0.66	0.67	4.46	4.54	7.43	7.62
57	1	0	1	0.44	0.45	3.76	4.01	6.86	7.08
58	1	0	0	0.84	0.86	2.77	2.97	4.60	4.87

1									
2									
3	1	0	0	0.54	0.54	2.78	2.78	4.43	4.44
4	1	0	1	0.27	0.27	3.33	3.33	5.25	5.26
5	1	0	0	0.59	0.60	2.60	2.79	4.24	4.52
6	1	0	0	0.54	0.55	2.31	2.44	4.19	4.68
7	1	1	1	0.86	0.85	2.84	2.80	4.83	4.67
8	1	0	1	0.55	0.55	3.65	3.65	5.93	5.93
9	0	0	0	0.76	0.78	2.40	2.66	4.02	4.28
10	0	0	0	0.43	0.43	2.28	2.28	3.55	3.57
11	1	0	0	0.48	0.50	3.10	3.34	5.01	5.32
12	1	0	1	0.93	0.94	2.90	3.12	4.49	4.79
13	1	0	1	0.61	0.63	3.76	3.82	6.69	6.58
14	0	0	0	0.37	0.37	2.12	2.12	3.77	3.78
15	1	0	0	0.40	0.40	3.19	3.21	4.93	4.96
16	1	1	1	0.53	0.53	4.54	4.59	7.25	7.36
17	1	0	1	0.66	0.67	4.47	4.53	7.47	7.59
18	1	0	0	0.45	0.47	2.83	3.13	4.89	5.24
19	1	1	1	0.45	0.46	3.56	3.60	5.66	5.71
20	1	0	0	0.80	0.79	2.96	2.96	4.65	4.65
21	0	0	1	0.38	0.38	3.03	3.04	4.96	4.98
22	1	0	0	0.76	0.78	2.37	2.67	3.95	4.30
23	1	0	1	0.61	0.63	3.76	3.83	6.71	6.59
24	0	0	0	0.37	0.39	3.33	3.67	5.99	6.60
25	0	0	0	0.43	0.43	3.81	4.23	6.76	7.07
26	0	0	0	0.33	0.33	1.83	1.95	3.35	3.62
27	1	0	0	0.86	0.86	3.26	3.26	5.00	5.00
28	1	0	1	0.41	0.41	1.83	2.04	2.88	3.16
29	1	0	0	0.93	0.95	2.57	2.82	4.54	4.83
30	1	0	1	0.44	0.44	3.80	3.81	6.90	6.92
31	1	0	1	0.80	0.80	2.96	2.96	4.65	4.65
32	1	0	0	0.49	0.49	2.26	2.47	3.75	4.11
33	0	0	0	0.40	0.41	2.23	2.25	3.38	3.41
34	1	0	0	1.00	1.00	3.02	3.02	5.13	5.13
35	1	0	1	1.44	1.47	2.87	3.09	5.50	5.56
36	1	0	1	0.34	0.34	2.08	2.08	3.88	3.89
37	1	0	0	0.50	0.50	3.42	3.42	5.74	5.75
38	1	0	0	0.38	0.38	2.80	2.72	4.72	4.58
39	1	0	0	0.54	0.55	3.44	3.47	5.64	5.68
40	0	0	0	0.55	0.55	2.50	2.52	5.05	5.10
41	1	0	0	1.52	1.52	3.37	3.37	5.75	5.75
42	0	0	0	0.52	0.52	3.61	3.63	5.72	5.74
43	1	0	0	0.32	0.32	2.38	2.58	4.79	5.16
44	1	0	1	0.47	0.48	2.85	3.13	5.13	5.43
45	1	0	0	1.44	1.48	2.83	3.10	5.41	5.57
46	1	0	0	0.41	0.43	2.98	3.30	4.90	5.33
47	1	0	1	0.52	0.52	2.45	2.37	3.91	3.80
48	1	0	0	0.39	0.41	3.78	3.91	6.61	6.81
49	1	0	1	0.50	0.51	3.19	3.36	5.15	5.41
50	1	0	0	0.55	0.56	2.42	2.67	3.96	4.30
51	1	0	1	1.00	1.03	2.54	2.79	4.62	4.86
52	1	0	1	0.41	0.41	3.83	3.83	7.06	7.07
53	1	0	1	0.59	0.60	2.21	2.44	3.70	4.03
54	1	0	0	0.31	0.31	2.64	2.64	5.64	5.64
55	1	0	1	0.44	0.45	4.49	4.53	7.42	7.51
56	1	0	1	0.40	0.39	3.69	4.03	5.95	6.32
57	1	0	1	0.52	0.53	2.62	2.68	4.29	4.39
58	1	0	0	0.64	0.65	4.49	4.59	7.35	7.56

1									
2									
3	1	0	1	0.36	0.36	2.07	2.08	3.80	3.82
4	1	0	1	0.94	0.94	2.88	2.92	4.69	4.65
5	1	0	0	0.41	0.41	3.16	3.44	5.48	5.93
6	0	0	0	0.94	0.95	3.13	3.25	4.77	4.94
7	1	0	1	0.37	0.37	3.29	3.53	6.52	6.75
8	1	0	1	0.31	0.31	2.63	2.63	5.63	5.64
9	1	0	1	0.55	0.55	2.39	2.43	4.23	4.61
10	0	0	0	0.42	0.43	2.99	3.28	4.95	5.31
11	0	0	0	0.36	0.36	3.61	3.84	5.72	6.12
12	0	0	0	0.53	0.53	3.36	3.41	5.37	5.52
13	1	0	1	0.39	0.39	3.83	3.84	7.09	7.10
14	1	0	0	0.52	0.49	3.19	3.13	5.35	5.09
15	0	0	0	0.84	0.85	2.77	2.85	4.50	4.48
16	0	0	0	0.44	0.45	4.53	4.56	7.72	7.78
17	1	0	0	0.62	0.62	3.06	3.06	5.09	5.09
18	1	0	0	1.02	1.04	2.51	2.81	4.49	4.86
19	0	0	0	0.56	0.56	2.85	2.84	4.48	4.52
20	0	0	0	0.56	0.56	2.48	2.67	4.08	4.29
21	1	0	1	0.53	0.56	2.49	2.69	3.90	4.27
22	1	0	0	0.33	0.32	3.57	3.66	6.24	6.29
23	1	0	0	0.43	0.43	3.81	3.82	6.96	6.97
24	1	0	0	0.40	0.40	4.14	4.15	7.51	7.55
25	1	0	0	0.32	0.32	3.99	4.00	6.81	6.85
26	0	0	0	0.58	0.56	2.62	2.40	4.40	4.35
27	1	0	0	0.60	0.61	4.57	4.63	7.46	7.59
28	0	0	0	0.49	0.50	3.11	3.39	5.29	5.79
29	1	0	0	0.61	0.63	2.68	2.92	4.42	4.82
30	1	0	0	0.54	0.54	2.77	2.77	4.43	4.43
31	1	0	0	0.83	0.85	2.79	3.02	4.33	4.66
32	1	0	0	0.54	0.55	2.23	2.44	3.62	3.87
33	1	0	0	0.43	0.44	3.43	3.73	6.63	6.87
34	1	0	0	0.62	0.62	3.04	3.03	4.72	4.73
35	1	0	0	0.47	0.47	2.62	2.61	4.74	4.75
36	1	0	0	0.53	0.56	2.46	2.69	3.85	4.28
37	0	0	0	0.36	0.36	4.15	4.16	6.65	6.66
38	0	0	0	0.36	0.37	1.87	2.04	3.24	3.52
39	1	0	0	0.38	0.36	3.63	3.56	6.40	6.12
40	0	0	0	0.38	0.38	3.52	3.81	6.66	6.91
41	0	0	0	0.40	0.40	4.04	4.39	6.69	7.16
42	0	0	0	0.36	0.36	2.08	2.08	3.83	3.83
43	0	0	0	0.49	0.49	3.17	3.43	5.23	5.63
44	1	0	0	0.47	0.46	2.34	2.41	4.01	4.23
45	1	0	0	0.76	0.78	2.37	2.67	3.96	4.30
46	1	0	0	0.55	0.57	2.26	2.51	3.56	3.95
47	1	0	0	0.35	0.35	1.26	1.38	3.16	3.29
48	1	0	0	0.42	0.42	3.15	3.17	5.33	5.36
49	1	0	0	0.54	0.57	3.41	3.55	5.77	5.93
50	0	0	0	0.41	0.40	3.11	3.35	5.24	5.48
51	1	0	0	0.39	0.39	4.37	4.39	6.69	6.73
52	0	0	0	0.40	0.41	4.36	4.41	7.02	7.13
53	1	0	0	0.40	0.40	4.67	4.68	7.56	7.57
54	1	0	0	0.34	0.34	3.96	3.99	6.67	6.74
55	1	0	0	0.63	0.63	2.73	2.73	5.68	5.68
56	1	0	0	0.58	0.59	4.21	4.40	6.50	7.01
57	1	0	1	0.32	0.31	3.12	3.34	6.07	6.19
58	0	0	0	0.41	0.41	3.83	3.83	7.02	7.02

1									
2									
3	1	0	0	0.87	0.87	3.15	3.14	5.10	5.14
4	1	0	0	1.44	1.48	2.83	3.10	5.41	5.57
5	0	0	0	0.63	0.63	2.67	2.67	5.58	5.60
6	0	0	0	0.44	0.43	3.83	4.12	6.96	7.01
7	1	0	0	0.36	0.35	2.23	2.56	3.86	4.21
8	1	0	0	0.55	0.56	2.45	2.67	4.02	4.30
9	0	0	0	0.41	0.41	3.73	3.82	6.91	7.07
10	1	0	1	0.39	0.39	3.55	3.57	5.80	5.83
11	1	0	0	0.62	0.62	3.04	3.03	5.04	5.05
12	1	0	0	0.39	0.37	3.68	3.85	6.41	6.34
13	1	0	0	0.39	0.39	3.82	3.84	7.05	7.08
14	1	0	0	0.45	0.46	2.76	3.00	4.83	5.19
15	0	0	0	0.45	0.45	3.77	3.98	6.87	7.03
16	0	0	0	0.95	0.95	3.36	3.36	5.13	5.13
17	0	0	0	0.88	0.88	3.20	3.20	5.24	5.24
18	0	0	0	0.60	0.61	2.48	2.75	4.09	4.39
19	1	0	0	0.35	0.34	2.58	2.78	4.28	4.61
20	1	0	0	0.41	0.41	4.47	4.47	7.10	7.11
21	1	0	0	0.54	0.54	2.28	2.44	4.18	4.71
22	0	0	0	0.38	0.38	2.48	2.81	4.01	4.49
23	1	0	0	0.37	0.36	2.41	2.39	4.09	4.01
24	1	0	1	0.44	0.44	3.81	3.81	6.91	6.92
25	0	0	0	0.43	0.44	3.74	3.76	5.88	5.90
26	0	0	0	0.63	0.63	2.73	2.73	5.68	5.68
27	0	0	0	0.63	0.63	2.35	2.51	5.51	5.64
28	0	0	0	0.98	0.99	2.70	2.61	4.69	4.62
29	1	0	0	0.46	0.46	3.77	3.77	5.74	5.75
30	1	0	0	0.56	0.55	2.39	2.29	3.84	3.68
31	1	0	0	0.34	0.34	3.28	3.53	6.87	7.10
32	1	0	0	0.63	0.63	2.38	2.53	4.93	5.28
33	0	0	0	0.52	0.52	2.42	2.58	4.08	4.23
34	1	0	0	0.25	0.26	2.23	2.41	4.50	4.77
35	1	0	0	0.54	0.55	2.23	2.44	3.64	3.87
36	1	0	0	0.44	0.44	3.74	4.03	6.84	7.10
37	1	0	0	0.53	0.55	2.16	2.43	4.22	4.78
38	0	0	0	0.47	0.47	2.62	2.61	4.74	4.75
39	1	0	0	0.66	0.68	2.40	2.69	3.96	4.32
40	1	0	0	0.39	0.39	2.60	2.60	4.50	4.52
41	1	0	0	0.45	0.46	3.61	3.62	5.74	5.76
42	1	0	0	0.41	0.41	3.13	3.13	5.22	5.22
43	1	0	0	0.61	0.61	3.04	3.04	4.90	4.90
44	0	0	0	0.40	0.40	2.54	2.82	4.14	4.55
45	1	0	0	0.52	0.53	2.32	2.54	3.79	4.10
46	1	0	0	0.37	0.37	3.35	3.47	7.19	7.11
47	0	0	0	0.35	0.36	3.87	3.94	7.08	7.24
48	1	0	0	0.44	0.44	3.80	4.18	6.85	7.04
49	1	0	0	0.99	1.01	2.75	2.66	4.80	4.66
50	1	0	0	0.41	0.41	3.88	3.91	6.13	6.11
51	1	0	0	0.51	0.51	3.67	3.67	6.29	6.29
52	1	0	0	0.43	0.44	3.13	3.41	4.96	5.59
53	1	0	0	0.45	0.45	3.12	3.44	5.00	5.36
54	1	0	0	0.40	0.43	3.53	4.04	5.61	6.29
55	1	0	0	0.41	0.41	2.55	2.55	4.66	4.67
56	0	0	0	1.44	1.47	2.92	3.05	5.60	5.53
57	1	0	0	0.41	0.40	3.68	4.02	6.38	6.69
58	0	0	0	0.36	0.36	3.83	3.91	6.99	7.14

1									
2									
3	1	0	0	0.76	0.78	2.41	2.66	4.03	4.28
4	1	0	0	1.05	1.07	2.68	2.95	4.58	5.02
5	1	0	0	0.30	0.31	3.36	3.41	5.84	5.97
6	1	0	0	0.33	0.33	1.82	1.95	3.35	3.62
7	1	0	0	0.59	0.59	3.79	4.18	6.77	7.04
8	1	0	0	0.39	0.41	2.98	3.37	4.08	4.62
9	1	0	0	0.63	0.63	2.72	2.72	5.65	5.66
10	1	0	0	0.87	0.87	3.19	3.18	5.20	5.21
11	0	0	0	0.42	0.42	3.72	4.10	6.80	7.11
12	1	0	0	1.52	1.52	3.37	3.37	5.74	5.74
13	1	0	0	0.48	0.49	3.42	3.43	5.57	5.58
14	0	0	0	0.41	0.41	2.67	2.92	4.66	5.02
15	1	0	0	0.84	0.86	2.77	2.98	4.57	4.89
16	1	0	0	0.43	0.46	3.53	4.09	6.55	7.33
17	1	0	0	0.50	0.50	3.13	3.37	5.31	5.76
18	0	0	0	0.35	0.36	2.04	2.07	3.64	3.73
19	1	0	0	0.52	0.56	3.09	3.50	5.51	6.12
20	1	0	0	0.53	0.54	4.20	4.22	7.78	7.81
21	0	0	0	0.40	0.39	2.48	2.65	4.24	4.39
22	1	0	0	0.39	0.40	3.20	3.54	6.36	6.76
23	0	0	0	0.59	0.60	2.21	2.44	3.69	4.04
24	1	0	0	0.39	0.41	4.08	4.36	6.31	6.69
25	0	0	0	0.60	0.61	2.62	2.84	4.35	4.71
26	1	0	0	0.34	0.34	3.03	3.03	4.91	4.91
27	1	0	0	0.33	0.35	1.69	1.88	3.25	3.53
28	0	0	0	0.60	0.61	2.50	2.75	4.15	4.38
29	1	0	0	0.44	0.44	3.56	3.39	6.68	6.49
30	1	0	0	0.43	0.43	3.79	3.82	6.92	6.98
31	1	0	0	0.54	0.54	2.76	2.76	4.41	4.42
32	0	0	0	0.39	0.39	3.14	3.14	5.02	5.02
33	1	0	0	0.34	0.35	1.69	1.90	3.19	3.53
34	0	0	0	0.45	0.46	3.59	3.61	5.71	5.74
35	1	0	0	0.65	0.65	4.53	4.53	8.24	8.25
36	1	0	0	0.84	0.86	2.76	2.98	4.55	4.90
37	1	0	0	0.63	0.64	3.81	4.16	7.40	7.82
38	1	0	1	0.37	0.36	2.93	3.25	5.16	5.56
39	1	0	0	0.39	0.40	2.96	3.29	4.73	5.19
40	1	0	0	0.39	0.39	3.82	3.84	7.07	7.10
41	0	0	0	0.41	0.41	3.70	4.05	6.47	6.79
42	1	0	1	0.41	0.40	3.68	4.03	6.38	6.69
43	0	0	0	0.40	0.40	3.21	3.51	6.66	6.85
44	1	0	0	0.64	0.65	3.71	3.73	7.00	6.91
45	0	0	0	0.56	0.56	3.61	3.61	6.06	6.07
46	1	0	0	0.40	0.41	2.11	2.35	3.77	4.21
47	1	0	1	0.53	0.56	2.52	2.69	3.95	4.26
48	1	0	0	0.50	0.50	2.43	2.37	3.94	3.89
49	1	0	0	0.35	0.35	1.52	1.52	3.47	3.47
50	1	0	0	0.58	0.60	2.20	2.44	3.68	4.04
51	1	0	0	0.44	0.45	3.97	4.27	6.60	7.07
52	1	0	0	0.46	0.45	3.58	3.41	6.66	6.44
53	0	0	0	0.44	0.45	3.72	4.02	6.81	7.10
54	1	0	0	0.60	0.59	2.39	2.28	3.92	3.76
55	1	0	0	0.41	0.42	3.74	3.82	6.89	7.03
56	1	0	1	0.40	0.40	2.54	2.82	4.16	4.54
57	1	0	0	0.39	0.39	3.83	3.84	7.10	7.11
58	1	0	0	0.50	0.50	3.01	3.22	5.50	6.08

1									
2									
3	1	0	0	0.37	0.39	2.79	2.94	4.61	4.83
4	1	0	0	0.35	0.34	3.33	3.44	7.24	7.09
5	1	0	0	0.41	0.41	3.14	3.45	5.46	5.97
6	0	0	0	0.49	0.49	3.16	3.44	5.22	5.65
7	1	0	0	0.42	0.41	2.61	2.80	4.26	4.48
8	1	0	0	0.32	0.34	1.76	2.00	2.88	3.21
9	0	0	0	0.40	0.40	3.12	3.13	4.99	5.00
10	1	0	0	0.48	0.48	3.78	4.01	7.24	7.51
11	0	0	0	0.37	0.38	2.90	2.97	4.75	4.87
12	1	0	0	0.43	0.43	4.48	4.48	7.39	7.39
13	0	0	0	0.56	0.56	2.65	2.65	4.10	4.11
14	1	0	0	0.86	0.86	3.18	3.19	4.87	4.90
15	0	0	0	0.93	0.94	2.90	3.12	4.49	4.79
16	0	0	0	0.39	0.39	3.78	3.83	7.01	7.10
17	0	0	0	0.35	0.38	1.81	2.03	3.16	3.53
18	1	0	0	0.34	0.34	2.20	2.20	3.42	3.42
19	1	0	0	0.49	0.50	2.94	3.24	5.47	6.15
20	1	0	0	0.46	0.46	3.74	4.06	7.25	7.53
21	0	0	0	0.55	0.55	2.39	2.31	3.85	3.69
22	1	0	0	0.50	0.50	4.32	4.34	7.40	7.43
23	0	0	0	0.52	0.52	2.72	2.73	4.47	4.50
24	1	0	0	0.57	0.57	2.91	2.91	4.64	4.64
25	0	0	0	1.51	1.52	3.32	3.32	5.65	5.70
26	0	0	0	0.83	0.85	2.79	3.02	4.33	4.66
27	1	0	0	0.33	0.33	1.83	1.96	3.36	3.62
28	1	0	0	0.56	0.56	2.83	2.83	4.44	4.50
29	0	0	0	0.55	0.56	3.60	3.61	6.05	6.06
30	0	0	0	0.66	0.69	2.31	2.59	3.92	4.35
31	1	0	0	0.49	0.50	3.63	3.69	5.95	6.04
32	1	0	0	0.43	0.44	3.74	3.82	6.85	6.98
33	1	0	0	0.87	0.87	3.20	3.19	5.22	5.23
34	0	0	0	0.95	0.95	3.36	3.36	5.13	5.13
35	0	0	0	0.85	0.84	2.87	2.83	4.53	4.43
36	1	0	0	0.35	0.36	2.81	2.80	4.84	4.85
37	1	0	0	0.63	0.61	2.65	2.54	4.37	4.15
38	1	0	0	0.46	0.50	3.07	3.35	4.85	5.32
39	0	0	0	0.48	0.48	2.43	2.44	5.40	5.42
40	0	0	0	0.63	0.64	3.79	4.14	6.54	7.02
41	0	0	0	0.65	0.67	3.65	4.05	6.90	7.36
42	0	0	0	0.93	0.95	2.61	2.82	4.64	4.81
43	1	0	0	0.34	0.34	2.08	2.08	3.87	3.88
44	1	0	1	0.52	0.53	3.81	4.01	7.11	7.45
45	0	0	0	0.37	0.37	2.53	2.80	4.14	4.60
46	0	0	0	0.46	0.46	3.76	4.04	7.28	7.50
47	0	0	0	0.69	0.69	2.80	2.80	4.68	4.68
48	1	0	0	0.40	0.40	2.28	2.28	3.47	3.47
49	1	0	0	0.36	0.36	2.93	3.26	5.16	5.58
50	0	0	0	0.36	0.36	2.90	3.23	4.78	5.24
51	1	0	0	0.54	0.55	2.22	2.44	3.62	3.87
52	1	0	0	0.35	0.35	3.73	3.75	6.32	6.36
53	1	0	0	0.60	0.61	2.48	2.75	4.10	4.39
54	1	0	0	0.41	0.41	1.85	2.06	2.90	3.18
55	0	0	0	0.54	0.55	2.47	2.50	4.98	5.06
56	1	0	0	0.58	0.59	4.21	4.39	6.48	6.99
57	0	0	0	0.85	0.85	2.77	2.94	4.43	4.58
58	1	0	0	0.64	0.65	4.52	4.56	7.43	7.52

1									
2									
3	1	0	0	0.55	0.55	3.49	3.51	5.71	5.73
4	1	0	0	0.32	0.32	3.66	3.68	6.65	6.69
5	1	0	0	0.59	0.60	2.60	2.82	4.21	4.55
6	1	0	0	0.50	0.50	3.78	4.13	7.03	7.28
7	1	0	0	0.56	0.56	2.65	2.65	4.11	4.11
8	1	0	0	0.34	0.35	1.73	1.91	3.27	3.55
9	1	0	1	0.85	0.87	2.76	3.02	4.53	4.93
10	0	0	0	0.52	0.53	3.58	3.61	5.63	5.68
11	1	0	0	0.35	0.36	3.74	3.79	7.27	7.42
12	1	0	0	0.30	0.31	3.28	3.55	5.68	6.07
13	1	0	0	0.37	0.36	2.94	3.25	5.16	5.56
14	1	0	0	0.69	0.69	2.80	2.80	4.68	4.68
15	1	0	0	0.94	0.93	2.96	2.92	4.98	4.71
16	0	0	0	0.44	0.44	4.02	4.06	7.09	7.17
17	0	0	0	1.54	1.54	3.47	3.47	5.36	5.37
18	0	0	0	0.93	0.94	2.90	3.11	4.52	4.78
19	1	0	0	1.44	1.47	2.94	3.05	5.64	5.54
20	0	0	0	0.85	0.86	2.77	2.84	4.77	4.74
21	1	0	1	0.39	0.39	2.68	2.94	4.52	4.90
22	1	0	0	0.55	0.54	2.62	2.47	4.23	4.14
23	0	0	0	0.95	0.95	3.36	3.36	5.13	5.13
24	1	0	0	0.60	0.61	2.46	2.75	4.06	4.40
25	1	0	0	0.62	0.62	3.05	3.04	5.06	5.06
26	1	0	0	0.55	0.56	2.42	2.67	3.97	4.30
27	1	0	0	0.44	0.45	4.44	4.58	7.60	7.85
28	1	0	0	0.55	0.55	3.51	3.51	5.73	5.74
29	1	0	0	0.83	0.85	2.79	3.02	4.34	4.66
30	1	0	0	0.62	0.62	3.06	3.06	5.09	5.09
31	1	0	0	0.40	0.42	4.25	4.40	6.83	7.11
32	1	0	0	0.45	0.46	2.21	2.41	3.88	4.31
33	1	0	1	0.30	0.31	3.22	3.49	5.70	6.18
34	1	0	0	0.39	0.39	3.42	3.30	6.67	6.54
35	1	0	0	0.55	0.55	2.64	2.63	4.08	4.09
36	0	0	0	0.54	0.55	3.51	3.56	6.20	6.25
37	1	0	0	0.55	0.55	2.60	2.60	4.00	4.03
38	1	0	0	0.64	0.64	2.41	2.57	5.36	5.51
39	1	0	0	0.53	0.53	3.61	3.63	5.78	5.81
40	1	0	0	0.53	0.56	3.20	3.45	5.30	5.62
41	1	0	0	0.88	0.88	3.20	3.20	5.24	5.25
42	0	0	0	0.63	0.63	2.35	2.51	5.50	5.64
43	1	0	0	0.44	0.44	3.59	3.61	5.63	5.66
44	1	0	0	0.37	0.37	3.54	3.54	5.74	5.75
45	1	0	0	0.60	0.61	2.47	2.75	4.08	4.40
46	1	0	0	0.68	0.68	2.78	2.77	4.63	4.64
47	0	0	0	0.39	0.39	3.23	3.24	5.30	5.30
48	0	0	0	0.40	0.40	3.10	3.10	4.92	4.96
49	0	0	0	0.94	0.95	3.25	3.27	4.92	4.98
50	1	0	0	0.59	0.59	3.80	4.21	6.77	7.08
51	1	0	0	0.65	0.65	4.53	4.53	8.24	8.25
52	1	0	0	0.43	0.44	3.79	4.14	7.10	7.40
53	0	0	0	0.59	0.60	2.60	2.80	4.22	4.53
54	0	0	0	0.40	0.40	3.24	3.24	5.00	5.01
55	0	0	0	0.33	0.32	3.23	3.43	6.14	6.32
56	1	0	0	0.36	0.37	3.28	3.54	6.50	6.77
57	1	0	0	0.40	0.39	3.07	3.38	5.18	5.55
58	1	0	0	0.63	0.63	2.73	2.73	5.67	5.68



1									
2									
3	1	0	0	0.44	0.44	4.64	4.66	7.36	7.41
4	1	0	0	0.46	0.48	3.78	4.34	7.15	8.00
5	0	0	0	0.33	0.35	1.69	1.88	3.25	3.53
6	1	0	0	0.55	0.55	2.34	2.44	4.20	4.66
7	0	0	0	0.64	0.66	3.66	3.78	7.03	6.98
8	1	0	0	0.34	0.34	3.06	3.06	4.87	4.88
9	0	0	0	0.86	0.86	3.26	3.26	5.00	5.00
10	1	0	1	0.39	0.38	2.59	2.54	4.46	4.20
11	0	0	0	0.35	0.36	2.81	2.80	4.84	4.85
12	1	0	0	0.40	0.40	2.53	2.83	4.13	4.56
13	1	0	1	0.47	0.50	3.08	3.36	4.97	5.36
14	0	0	0	0.45	0.46	3.61	3.62	5.74	5.76
15	1	0	0	0.60	0.60	2.61	2.62	4.28	4.31
16	0	0	0	0.92	0.94	2.89	3.13	4.47	4.80
17	1	0	0	0.39	0.39	4.48	4.51	7.14	7.21
18	1	0	0	0.59	0.59	2.59	2.75	4.28	4.47
19	1	0	0	0.52	0.52	4.24	3.98	6.69	6.88
20	1	0	0	0.51	0.53	3.06	3.29	5.10	5.42
21	0	0	0	0.47	0.49	3.49	3.57	5.60	5.69
22	1	0	0	0.37	0.36	3.43	3.42	7.56	7.20
23	1	0	0	0.47	0.50	3.09	3.35	4.97	5.34
24	1	0	0	0.34	0.34	1.69	1.83	3.20	3.38
25	1	0	0	0.52	0.52	4.08	3.98	7.07	6.86
26	0	0	0	0.40	0.40	2.17	2.36	3.91	4.27
27	1	0	1	0.49	0.50	3.11	3.38	5.30	5.78
28	1	0	0	0.36	0.36	2.91	3.21	4.80	5.22
29	1	0	0	0.85	0.88	2.81	3.06	4.60	4.99
30	1	0	0	0.51	0.53	3.25	3.45	5.18	5.55
31	0	0	0	0.43	0.43	3.72	3.74	5.13	5.15
32	0	0	0	0.50	0.50	2.62	2.64	4.33	4.36
33	1	0	0	0.41	0.44	2.97	3.31	4.75	5.31
34	0	0	0	0.60	0.61	2.69	2.69	4.55	4.49
35	0	0	0	0.84	0.85	2.79	3.01	4.35	4.65
36	1	0	0	0.60	0.62	2.70	2.94	4.29	4.70
37	1	0	0	0.52	0.52	3.53	3.55	6.81	6.83
38	1	0	0	0.76	0.78	2.38	2.66	3.98	4.29
39	0	0	0	0.43	0.43	1.92	2.09	3.22	3.36
40	0	0	0	0.47	0.50	3.09	3.36	4.95	5.34
41	0	0	0	0.38	0.38	2.98	3.27	4.69	5.10
42	1	0	0	0.43	0.44	3.95	4.22	6.59	7.03
43	1	0	0	0.34	0.35	1.81	1.97	3.29	3.59
44	0	0	0	0.54	0.54	2.75	2.76	4.39	4.40
45	1	0	0	0.42	0.43	3.28	3.54	6.51	6.72
46	0	0	0	0.62	0.62	3.05	3.04	5.06	5.06
47	1	0	0	0.49	0.50	2.70	2.96	5.24	5.48
48	1	0	0	0.79	0.79	2.82	2.86	4.34	4.46
49	0	0	0	0.35	0.35	2.12	2.12	3.88	3.88
50	1	0	0	0.35	0.37	1.86	2.05	3.36	3.67
51	0	0	0	0.34	0.35	1.74	1.88	3.33	3.49
52	1	0	0	0.34	0.35	1.78	1.97	3.44	3.71
53	1	0	0	0.39	0.39	1.69	1.69	2.74	2.75
54	1	0	0	0.32	0.31	3.27	3.35	5.63	5.85
55	0	0	0	0.60	0.61	2.62	2.84	4.35	4.71
56	0	0	0	0.38	0.39	3.49	3.56	5.38	5.50
57	1	0	0	0.57	0.56	2.49	2.65	5.05	5.25
58	0	0	0	0.55	0.55	2.55	2.55	5.14	5.16

1									
2									
3	0	0	0	0.35	0.35	2.87	2.87	4.54	4.54
4	1	0	0	0.86	0.85	2.84	2.79	4.83	4.67
5	1	0	0	0.61	0.62	3.69	4.04	6.75	6.97
6	0	0	0	0.59	0.59	2.65	2.68	4.33	4.31
7	1	0	0	1.49	1.52	2.89	3.19	5.29	5.68
8	1	0	1	0.76	0.78	2.41	2.66	4.05	4.27
9	0	0	0	0.41	0.41	1.84	2.05	2.91	3.17
10	1	0	0	0.63	0.61	2.66	2.54	4.37	4.15
11	0	0	0	0.64	0.64	2.98	2.96	4.64	4.65
12	0	0	0	0.76	0.78	2.38	2.66	3.97	4.30
13	0	0	0	0.38	0.39	3.01	3.01	4.82	4.83
14	1	0	0	0.52	0.53	2.33	2.47	3.93	4.03
15	1	0	0	0.62	0.62	3.06	3.06	5.09	5.09
16	1	0	0	0.66	0.69	4.39	4.62	7.26	7.72
17	0	0	0	1.44	1.48	2.82	3.10	5.38	5.57
18	0	0	0	0.60	0.60	2.57	2.60	4.20	4.26
19	0	0	0	0.39	0.40	2.00	2.26	3.06	3.35
20	0	0	0	0.19	0.19	1.64	1.64	3.08	3.03
21	1	0	0	0.40	0.40	3.06	3.08	4.84	4.91
22	1	0	0	0.36	0.36	3.45	3.36	7.09	6.82
23	1	0	0	0.36	0.36	2.08	2.08	3.82	3.83
24	1	0	0	0.44	0.46	3.58	3.83	6.56	6.98
25	1	0	0	0.88	0.88	3.20	3.20	5.24	5.25
26	0	0	0	0.63	0.63	2.73	2.73	5.68	5.68
27	0	0	0	0.39	0.39	3.43	3.74	7.16	7.39
28	1	0	0	0.41	0.41	1.85	2.06	2.91	3.18
29	1	0	0	0.40	0.40	1.90	2.12	2.99	3.29
30	1	0	0	0.93	0.94	2.90	3.12	4.48	4.80
31	1	0	0	0.92	0.94	2.90	3.13	4.48	4.80
32	0	0	0	0.92	0.94	2.90	3.13	4.47	4.80
33	0	0	0	0.42	0.43	1.87	2.10	3.07	3.38
34	1	0	0	0.38	0.38	3.83	3.84	7.73	7.74
35	0	0	0	0.84	0.86	2.76	2.98	4.55	4.90
36	1	0	0	0.60	0.60	2.96	2.98	4.75	4.78
37	1	0	0	0.60	0.62	2.61	2.87	4.32	4.74
38	1	0	1	0.38	0.39	3.24	3.52	6.58	6.82
39	1	0	0	0.37	0.36	3.58	3.84	6.11	6.36
40	1	0	0	0.39	0.42	3.00	3.39	4.13	4.68
41	0	0	0	0.93	0.94	2.90	3.12	4.48	4.80
42	1	0	0	0.44	0.45	4.53	4.56	7.71	7.78
43	0	0	0	0.61	0.62	3.69	4.05	6.74	6.98
44	0	0	0	0.69	0.69	2.79	2.79	4.67	4.67
45	0	0	0	0.32	0.32	3.82	3.83	6.45	6.50
46	1	0	0	0.58	0.60	2.16	2.44	3.60	4.04
47	0	0	0	0.83	0.85	2.79	3.02	4.33	4.66
48	1	0	0	0.38	0.39	3.38	3.75	6.01	6.62
49	0	0	0	0.33	0.33	1.83	1.96	3.36	3.62
50	0	0	0	0.60	0.60	2.61	2.62	4.27	4.30
51	0	0	0	0.59	0.59	2.58	2.72	4.34	4.44
52	1	0	0	0.93	0.94	2.90	3.13	4.48	4.80
53	1	0	0	0.63	0.63	2.71	2.71	5.64	5.66
54	1	0	0	0.50	0.50	4.47	4.49	7.52	7.55
55	0	0	0	0.52	0.53	2.33	2.51	3.86	4.06
56	0	0	0	0.60	0.61	2.48	2.75	4.10	4.39
57	1	0	0	1.47	1.50	3.02	3.24	5.03	5.18
58	1	0	0	0.93	0.94	2.90	3.12	4.48	4.80

1									
2									
3	0	0	0	0.55	0.55	2.55	2.55	5.14	5.17
4	1	0	0	0.94	0.94	2.89	3.05	4.59	4.73
5	1	0	0	0.47	0.50	3.08	3.36	4.97	5.36
6	1	0	0	0.32	0.32	3.24	3.22	5.88	5.72
7	0	0	0	0.64	0.63	2.40	2.57	5.35	5.51
8	1	0	0	0.39	0.40	3.04	3.37	4.96	5.40
9	1	0	0	0.60	0.61	2.66	2.70	4.54	4.50
10	1	0	0	0.43	0.43	3.32	3.49	6.61	6.67
11	1	0	0	0.36	0.36	3.27	3.54	6.86	7.10
12	1	0	1	0.84	0.86	2.77	2.98	4.57	4.89
13	1	0	0	0.62	0.62	2.98	2.98	4.91	4.95
14	0	0	0	0.51	0.52	4.24	4.57	6.96	7.56
15	1	0	0	0.55	0.55	2.45	2.66	4.97	5.28
16	1	0	0	0.55	0.55	3.50	3.51	5.72	5.74
17	1	0	0	0.66	0.67	2.35	2.55	4.04	4.31
18	1	0	0	0.46	0.46	3.62	3.62	5.76	5.77
19	1	0	0	0.84	0.86	2.77	2.98	4.57	4.89
20	1	0	0	0.84	0.85	2.76	2.88	4.51	4.55
21	1	0	0	0.39	0.40	2.97	3.28	4.75	5.17
22	0	0	0	0.93	0.94	2.90	3.12	4.49	4.79
23	1	0	0	0.39	0.39	3.95	4.30	6.63	7.07
24	1	0	1	0.45	0.45	3.13	3.42	5.07	5.42
25	1	0	1	0.53	0.56	3.19	3.43	5.29	5.62
26	0	0	0	0.39	0.39	2.57	2.57	4.43	4.48
27	1	0	0	0.53	0.55	2.18	2.45	4.31	4.85
28	1	0	0	0.41	0.43	2.98	3.30	4.89	5.33
29	0	0	0	0.36	0.37	1.86	2.04	3.23	3.53
30	1	0	0	0.38	0.39	1.31	1.45	2.73	2.74
31	1	0	0	0.38	0.39	3.37	3.73	5.98	6.58
32	0	0	0	0.34	0.35	3.24	3.58	6.21	6.74
33	1	0	0	0.65	0.66	4.51	4.55	8.19	8.29
34	1	0	0	0.65	0.66	4.51	4.55	8.19	8.29
35	0	0	0	0.52	0.53	2.32	2.54	3.80	4.10
36	1	0	0	0.83	0.85	2.79	3.02	4.33	4.66
37	0	0	0	0.93	0.94	2.90	3.12	4.48	4.80
38	0	0	0	0.99	1.00	2.97	2.97	5.02	5.06
39	1	0	0	0.30	0.31	3.83	3.85	6.88	6.92
40	1	0	1	1.48	1.51	2.85	3.16	5.29	5.64
41	0	0	0	0.95	0.95	3.36	3.36	5.13	5.13
42	0	0	0	1.04	1.04	2.97	2.97	4.94	5.01
43	1	0	1	0.30	0.31	3.23	3.48	5.71	6.16
44	1	0	1	0.38	0.40	3.07	3.16	5.01	5.15
45	1	0	0	0.45	0.45	3.40	3.51	6.53	6.55
46	0	0	0	0.39	0.38	2.40	2.71	4.21	4.57
47	1	0	0	0.35	0.35	1.33	1.29	3.20	3.10
48	1	0	0	0.49	0.50	2.94	3.24	5.47	6.15
49	0	0	0	0.60	0.61	2.46	2.75	4.06	4.40
50	1	0	0	0.67	0.65	2.54	2.53	5.59	5.47
51	1	0	1	0.36	0.37	3.24	3.54	6.93	7.20
52	0	0	0	1.44	1.47	2.89	3.08	5.53	5.55
53	1	0	0	0.52	0.52	3.88	4.21	6.81	7.04
54	1	0	0	0.37	0.37	3.51	3.53	5.69	5.73
55	1	0	1	0.49	0.49	3.26	3.14	5.68	5.83
56	0	0	0	0.41	0.41	2.54	2.54	4.64	4.65
57	1	0	0	0.52	0.54	2.35	2.61	3.74	4.16
58	0	0	0	0.40	0.40	3.42	3.29	6.77	6.63

1									
2									
3	1	0	0	0.49	0.53	3.24	3.55	5.11	5.57
4	0	0	0	0.35	0.34	3.55	3.76	5.97	6.33
5	1	0	0	0.35	0.35	3.09	3.41	5.36	5.82
6	1	0	0	0.34	0.35	1.77	1.94	3.27	3.56
7	0	0	0	0.51	0.53	3.05	3.27	5.12	5.42
8	1	0	0	0.35	0.36	3.24	3.54	6.80	7.08
9	1	0	0	0.44	0.44	3.30	3.55	6.46	6.67
10	0	0	0	0.40	0.40	4.41	4.42	7.12	7.14
11	1	0	0	0.35	0.35	3.40	3.48	6.75	6.75
12	0	0	0	0.59	0.58	2.29	2.43	5.46	5.55
13	1	0	0	0.48	0.50	3.09	3.34	4.99	5.33
14	0	0	0	0.45	0.45	3.13	3.42	5.03	5.33
15	1	0	0	0.35	0.36	3.25	3.55	6.78	7.07
16	1	0	0	0.43	0.43	4.13	4.15	7.36	7.40
17	1	0	0	0.37	0.37	2.15	2.15	3.91	3.91
18	1	0	0	0.85	0.85	2.82	2.85	4.50	4.45
19	1	0	0	0.40	0.40	3.83	3.84	7.08	7.10
20	0	0	0	0.59	0.60	2.60	2.82	4.20	4.55
21	0	0	0	0.31	0.31	3.15	3.33	5.45	5.79
22	1	0	0	0.52	0.56	3.10	3.51	5.23	5.85
23	0	0	0	0.87	0.87	3.20	3.19	5.22	5.23
24	1	0	0	0.53	0.53	4.54	4.59	7.25	7.35
25	0	0	0	0.56	0.55	2.48	2.44	4.32	4.58
26	0	0	0	0.45	0.47	3.93	4.41	6.59	7.46
27	0	0	0	0.92	0.94	2.90	3.13	4.48	4.80
28	1	0	0	0.31	0.31	3.85	3.85	6.94	6.94
29	1	0	1	0.41	0.41	2.77	2.79	4.81	4.83
30	0	0	0	0.41	0.41	1.83	2.04	2.88	3.16
31	0	0	0	0.45	0.46	4.44	4.45	7.55	7.57
32	1	0	0	0.50	0.50	4.30	4.35	7.37	7.46
33	1	0	0	0.65	0.66	4.52	4.54	8.23	8.26
34	1	0	0	0.53	0.55	2.19	2.44	3.56	3.86
35	1	0	0	0.76	0.78	2.39	2.66	3.99	4.29
36	1	0	0	0.63	0.64	3.80	4.16	7.40	7.81
37	1	0	0	0.40	0.41	2.19	2.24	3.30	3.37
38	1	0	1	0.68	0.69	4.47	4.48	7.83	7.86
39	1	0	0	0.36	0.37	3.50	3.56	5.86	5.98
40	1	0	0	0.39	0.38	2.45	2.59	4.28	4.37
41	1	0	0	0.35	0.35	1.46	1.49	3.29	3.42
42	0	0	0	0.62	0.62	3.01	3.00	4.65	4.67
43	1	0	0	0.31	0.31	2.27	2.45	5.06	5.35
44	1	0	1	0.46	0.46	3.72	3.75	5.64	5.70
45	1	0	0	0.52	0.53	3.81	4.01	7.10	7.44
46	0	0	0	0.43	0.43	3.87	4.24	6.65	7.00
47	1	0	0	0.39	0.40	2.28	2.51	4.05	4.47
48	0	0	0	0.37	0.38	3.30	3.54	7.30	7.47
49	1	0	1	0.68	0.65	2.59	2.44	5.17	5.03
50	1	0	0	0.36	0.35	3.34	3.49	7.21	7.13
51	1	0	0	0.51	0.53	3.06	3.29	5.11	5.42
52	0	0	0	1.52	1.53	3.39	3.40	5.17	5.28
53	0	0	0	0.40	0.42	2.27	2.43	4.14	4.46
54	1	0	0	0.51	0.51	3.21	3.35	5.19	5.40
55	1	0	0	0.47	0.47	2.88	3.11	5.00	5.21
56	1	0	0	0.36	0.37	3.75	3.83	7.21	7.36
57	1	0	0	0.42	0.42	3.20	3.20	5.39	5.40
58	0	0	0	0.61	0.62	2.97	2.98	4.88	4.93

1									
2									
3	1	0	0	0.39	0.39	4.40	4.40	6.72	6.72
4	0	0	0	0.30	0.31	1.71	1.87	3.83	4.07
5	0	0	0	0.51	0.51	2.33	2.50	3.99	4.18
6	0	0	0	0.45	0.45	3.83	3.84	6.59	6.60
7	0	0	0	0.40	0.40	2.17	2.36	3.91	4.27
8	0	0	0	0.39	0.39	4.39	4.40	6.71	6.72
9	0	0	0	0.42	0.42	3.19	3.20	5.39	5.40
10	1	0	0	0.41	0.40	3.74	3.74	6.20	6.04
11	0	0	0	0.92	0.94	2.89	3.13	4.47	4.80
12	1	0	0	0.39	0.38	3.42	3.36	6.82	6.64
13	1	0	0	0.83	0.85	2.79	3.02	4.33	4.66
14	1	0	0	0.60	0.61	2.62	2.84	4.35	4.71
15	1	0	0	0.50	0.52	3.58	3.64	6.15	6.22
16	1	0	0	0.37	0.37	2.16	2.16	3.89	3.90
17	1	0	1	0.51	0.53	3.01	3.27	5.01	5.40
18	1	0	0	0.50	0.50	3.78	4.11	7.03	7.25
19	1	0	0	0.76	0.79	2.34	2.69	3.83	4.31
20	0	0	0	0.36	0.37	2.03	2.06	3.67	3.74
21	0	0	0	0.60	0.61	2.64	2.70	4.53	4.52
22	0	0	0	0.36	0.36	3.27	3.55	6.48	6.79
23	0	0	0	0.33	0.33	1.86	1.96	3.42	3.59
24	1	0	0	0.59	0.60	3.71	4.09	7.50	7.89
25	0	0	0	0.58	0.60	2.57	2.84	4.14	4.55
26	0	0	0	0.54	0.55	2.23	2.44	3.62	3.87
27	1	0	0	0.84	0.86	2.76	2.98	4.55	4.90
28	0	0	0	0.93	0.94	2.90	3.10	4.52	4.78
29	1	0	0	0.67	0.70	2.42	2.77	3.88	4.41
30	1	0	0	0.31	0.33	3.43	3.79	5.85	6.48
31	1	0	0	0.40	0.42	2.20	2.43	4.03	4.46
32	1	0	0	0.41	0.41	1.84	2.05	2.91	3.17
33	0	0	0	0.54	0.55	2.23	2.44	3.64	3.87
34	1	0	0	0.31	0.31	2.64	2.64	5.64	5.64
35	1	0	0	0.45	0.46	3.75	3.81	6.78	6.88
36	0	0	0	0.59	0.59	2.30	2.43	5.49	5.54
37	1	0	0	0.34	0.36	1.75	1.94	3.23	3.51
38	1	0	0	0.53	0.54	2.70	2.71	4.28	4.32
39	1	0	0	0.36	0.35	3.39	3.64	6.78	6.95
40	1	0	0	0.54	0.54	2.30	2.44	4.18	4.69
41	0	0	0	0.39	0.40	4.63	4.66	7.41	7.47
42	1	0	0	0.41	0.41	3.66	4.01	6.81	7.11
43	0	0	0	0.51	0.51	3.21	3.22	5.73	5.73
44	0	0	0	0.93	0.94	2.90	3.12	4.49	4.79
45	0	0	0	0.57	0.57	2.91	2.91	4.63	4.64
46	1	0	0	0.43	0.43	3.26	3.54	6.52	6.74
47	1	0	0	0.26	0.26	2.56	2.58	4.98	5.02
48	1	0	0	0.46	0.47	4.37	4.39	7.80	7.83
49	0	0	0	0.62	0.63	3.71	4.12	6.70	7.07
50	1	0	0	0.42	0.42	3.52	3.38	6.73	6.59
51	0	0	0	0.40	0.40	3.13	3.13	5.00	5.01
52	0	0	0	0.39	0.39	3.82	3.84	7.07	7.10
53	1	0	0	0.43	0.43	3.30	3.51	6.58	6.70
54	0	0	0	0.46	0.46	3.62	3.62	5.76	5.77
55	1	0	0	0.60	0.62	2.50	2.84	3.99	4.50
56	1	0	0	0.39	0.38	3.46	3.36	6.72	6.55
57	1	0	0	0.59	0.59	3.80	4.21	6.76	7.08
58	1	0	1	0.43	0.43	4.48	4.48	7.39	7.40

1									
2									
3	0	0	0	0.61	0.61	2.67	2.67	4.40	4.40
4	0	0	0	0.40	0.41	2.65	2.93	4.64	5.02
5	1	0	0	0.36	0.36	4.15	4.16	6.66	6.66
6	1	0	0	0.86	0.86	3.24	3.24	4.97	4.98
7	1	0	0	0.33	0.34	2.04	2.05	3.72	3.80
8	0	0	0	0.39	0.38	2.42	2.69	4.26	4.54
9	1	0	0	0.35	0.37	3.20	3.69	6.53	7.29
10	1	0	1	0.37	0.36	3.44	3.33	6.55	6.43
11	1	0	0	0.50	0.50	4.03	4.11	6.75	6.81
12	0	0	0	0.61	0.62	2.95	2.97	4.84	4.91
13	1	0	1	0.53	0.50	3.23	3.17	5.44	5.19
14	1	0	0	0.43	0.43	3.80	4.21	6.78	7.06
15	1	0	0	0.53	0.54	2.61	2.68	4.12	4.24
16	0	0	0	0.44	0.44	2.49	2.49	4.29	4.30
17	1	0	0	0.61	0.61	2.62	2.79	4.43	4.64
18	1	0	1	0.37	0.37	3.84	3.84	7.10	7.11
19	1	0	0	0.39	0.39	3.99	4.33	6.69	7.11
20	0	0	0	0.62	0.62	3.06	3.06	5.09	5.09
21	1	0	0	0.45	0.46	2.79	3.00	4.87	5.18
22	1	0	1	0.43	0.43	3.81	4.23	6.76	7.08
23	1	0	0	0.43	0.43	2.03	1.99	3.30	3.21
24	1	0	0	0.61	0.63	3.76	3.82	6.69	6.58
25	1	0	0	0.93	0.94	2.90	3.12	4.48	4.80
26	0	0	0	0.37	0.36	2.94	3.24	5.17	5.55
27	1	0	0	0.48	0.48	2.48	2.48	5.46	5.47
28	1	0	0	0.43	0.44	3.43	3.73	6.63	6.87
29	1	0	0	0.26	0.27	2.72	3.02	4.66	4.93
30	1	0	0	0.59	0.62	2.44	2.78	3.94	4.43
31	1	0	0	0.60	0.60	3.00	3.00	4.81	4.83
32	0	0	0	0.47	0.46	3.29	3.35	5.30	5.26
33	1	0	0	0.88	0.88	3.21	3.21	5.25	5.25
34	1	0	1	0.50	0.52	3.05	3.31	5.25	5.78
35	1	0	0	0.32	0.31	3.35	3.33	5.71	5.81
36	1	0	0	0.62	0.62	3.06	3.05	5.08	5.09
37	1	0	0	0.50	0.50	2.59	2.62	4.28	4.33
38	1	0	0	0.62	0.62	3.06	3.05	5.08	5.08
39	0	0	0	0.64	0.63	2.40	2.57	5.34	5.51
40	1	0	0	0.39	0.39	4.09	4.10	7.14	7.17
41	0	0	0	0.40	0.40	3.57	3.83	5.41	5.93
42	1	0	0	0.62	0.62	3.05	3.04	5.06	5.06
43	1	0	0	0.32	0.32	3.63	3.67	6.55	6.67
44	1	0	0	0.45	0.46	4.40	4.45	7.50	7.60
45	1	0	0	0.45	0.45	3.12	3.43	5.01	5.35
46	1	0	0	1.47	1.50	3.02	3.25	5.00	5.19
47	1	0	0	0.63	0.63	2.39	2.53	4.93	5.27
48	1	0	0	0.40	0.41	2.22	2.36	3.95	4.25
49	1	0	0	0.54	0.55	2.23	2.44	3.64	3.87
50	1	0	0	0.53	0.56	3.25	3.44	5.38	5.62
51	1	0	0	0.54	0.55	2.23	2.44	3.63	3.87
52	0	0	0	0.37	0.37	3.85	3.85	7.40	7.41
53	1	0	0	0.42	0.43	4.10	4.40	6.81	7.25
54	1	0	0	0.41	0.41	1.85	2.06	2.90	3.18
55	1	0	0	0.40	0.40	3.12	3.12	4.98	4.99
56	1	0	0	0.41	0.43	2.98	3.30	4.90	5.33
57	1	0	0	0.42	0.42	3.20	3.20	5.40	5.41
58	1	0	0	0.35	0.36	3.63	3.82	6.86	7.21

1									
2									
3	1	0	0	0.40	0.40	3.75	4.06	6.32	6.71
4	0	0	0	0.45	0.45	3.79	3.81	6.85	6.87
5	0	0	0	0.53	0.53	3.34	3.41	5.33	5.52
6	1	0	0	0.33	0.32	3.22	3.37	5.85	6.07
7	0	0	0	0.55	0.55	2.53	2.53	5.10	5.13
8	1	0	0	0.35	0.35	3.09	3.41	5.36	5.82
9	1	0	0	0.66	0.67	2.32	2.56	3.99	4.33
10	0	0	0	0.62	0.64	3.73	4.06	6.52	6.88
11	1	0	0	0.31	0.31	3.74	3.76	6.62	6.66
12	1	0	0	0.49	0.50	3.15	3.30	5.17	5.31
13	1	0	0	0.94	0.94	2.88	3.04	4.61	4.73
14	1	0	0	0.39	0.42	3.12	3.50	4.84	5.44
15	1	0	0	0.67	0.67	2.58	2.50	4.20	4.04
16	1	0	0	0.38	0.38	2.11	2.11	3.57	3.58
17	1	0	0	0.40	0.40	3.83	3.84	7.09	7.10
18	1	0	0	0.44	0.44	4.64	4.66	7.36	7.41
19	1	0	0	0.34	0.34	1.81	1.99	3.07	3.21
20	0	0	0	0.50	0.50	4.46	4.49	7.51	7.56
21	1	0	0	0.37	0.36	2.93	3.25	5.16	5.56
22	1	0	0	0.37	0.38	3.98	4.23	6.39	6.78
23	1	0	0	0.86	0.87	3.11	3.12	5.02	5.09
24	0	0	0	0.84	0.85	2.79	3.00	4.37	4.64
25	1	0	0	0.85	0.86	2.77	2.96	4.63	4.85
26	1	0	0	1.52	1.52	3.37	3.37	5.74	5.75
27	1	0	1	0.47	0.46	3.32	3.26	5.30	5.15
28	0	0	0	0.60	0.61	2.62	2.84	4.35	4.71
29	1	0	0	0.66	0.68	2.39	2.70	3.94	4.33
30	0	0	0	0.67	0.70	3.76	4.28	6.81	7.67
31	1	0	1	0.60	0.61	2.48	2.75	4.10	4.39
32	0	0	0	0.38	0.39	2.54	2.83	4.20	4.66
33	1	0	0	0.51	0.53	3.06	3.29	5.11	5.42
34	1	0	0	0.54	0.54	2.29	2.44	4.18	4.70
35	1	0	0	0.68	0.69	2.91	2.91	4.49	4.55
36	1	0	0	0.52	0.52	3.88	4.22	6.80	7.05
37	1	0	0	0.59	0.59	2.59	2.70	4.36	4.41
38	0	0	0	0.36	0.35	1.27	1.35	3.18	3.17
39	1	0	0	0.62	0.62	3.04	3.04	4.74	4.74
40	1	0	1	0.30	0.30	2.75	3.03	5.22	5.40
41	1	0	1	0.52	0.52	3.88	4.22	6.80	7.05
42	0	0	0	0.65	0.65	4.53	4.53	8.24	8.25
43	1	0	0	0.51	0.53	3.06	3.29	5.10	5.42
44	0	0	0	0.50	0.50	4.48	4.48	7.54	7.54
45	0	0	0	0.62	0.62	3.03	3.02	4.69	4.70
46	0	0	0	0.38	0.37	2.49	2.81	3.95	4.45
47	1	0	0	0.44	0.44	3.77	3.81	6.85	6.93
48	1	0	0	0.44	0.44	3.87	4.08	7.28	7.42
49	1	0	0	0.40	0.41	2.18	2.36	3.91	4.27
50	0	0	0	0.39	0.39	1.69	1.69	2.73	2.75
51	1	0	0	0.62	0.62	3.06	3.06	5.09	5.09
52	1	0	0	0.60	0.61	2.62	2.84	4.34	4.71
53	1	0	0	0.38	0.37	3.27	3.14	5.68	5.47
54	1	0	0	0.64	0.63	2.37	2.50	5.56	5.63
55	1	0	0	0.41	0.41	3.66	4.01	6.80	7.11
56	1	0	0	0.44	0.44	4.65	4.66	7.39	7.40
57	1	0	0	0.39	0.40	2.97	3.29	4.75	5.18
58	1	0	0	0.58	0.59	4.21	4.40	6.49	7.01

1									
2									
3	0	0	0	0.38	0.38	2.19	2.19	3.78	3.80
4	1	0	0	0.85	0.88	2.80	3.05	4.59	4.98
5	0	0	0	0.30	0.31	3.76	3.81	6.70	6.84
6	1	0	0	0.54	0.55	2.23	2.44	3.62	3.87
7	1	0	0	0.63	0.63	2.69	2.69	5.63	5.63
8	0	0	0	0.46	0.46	3.75	4.04	7.26	7.50
9	0	0	0	0.43	0.44	3.43	3.72	6.63	6.85
10	1	0	0	0.50	0.53	4.16	4.58	7.18	7.83
11	1	0	1	0.34	0.35	1.73	1.91	3.26	3.55
12	0	0	0	0.50	0.51	2.32	2.54	3.92	4.24
13	0	0	0	0.37	0.38	3.30	3.54	7.29	7.47
14	0	0	0	0.97	0.98	3.01	3.01	4.97	5.03
15	0	0	0	0.49	0.49	2.26	2.47	3.75	4.10
16	1	0	0	0.39	0.39	3.58	3.60	5.53	5.57
17	1	0	0	0.50	0.50	3.78	4.11	7.03	7.25
18	1	0	0	0.43	0.43	3.34	3.49	6.60	6.65
19	0	0	0	1.52	1.52	3.36	3.36	5.73	5.74
20	1	0	0	0.45	0.46	3.59	3.61	5.71	5.74
21	0	0	0	0.34	0.34	3.03	3.02	4.71	4.77
22	1	0	0	0.58	0.58	2.68	2.64	4.31	4.25
23	1	0	0	0.38	0.38	2.38	2.72	4.18	4.59
24	0	0	0	0.85	0.87	2.97	3.16	4.51	4.84
25	1	0	0	0.48	0.50	3.10	3.34	5.02	5.32
26	1	0	0	0.67	0.72	3.87	4.52	6.90	8.02
27	1	0	0	0.43	0.45	4.58	4.66	7.26	7.43
28	1	0	0	0.40	0.40	3.58	3.78	5.28	5.81
29	0	0	0	0.61	0.63	3.76	3.82	6.68	6.59
30	0	0	0	0.32	0.31	3.16	3.30	6.26	6.17
31	1	0	0	0.43	0.45	3.23	3.64	6.29	6.81
32	1	0	0	0.40	0.40	1.97	2.21	3.06	3.38
33	1	0	0	1.47	1.50	3.02	3.25	5.01	5.19
34	1	0	0	0.46	0.48	4.47	4.73	7.24	7.73
35	1	0	0	0.31	0.32	3.54	3.54	6.31	6.33
36	1	0	0	0.58	0.58	2.60	2.60	5.66	5.67
37	0	0	0	0.34	0.34	3.54	3.77	5.96	6.35
38	1	0	0	0.22	0.21	1.92	1.96	3.51	3.43
39	0	0	1	0.36	0.36	3.57	3.59	5.99	6.02
40	1	0	0	0.53	0.53	4.57	4.58	7.30	7.31
41	1	0	1	0.83	0.85	2.79	3.02	4.34	4.66
42	1	0	0	0.61	0.61	3.03	3.04	4.88	4.89
43	0	0	0	0.41	0.41	2.55	2.55	4.67	4.67
44	1	0	0	0.49	0.51	3.16	3.40	5.06	5.44
45	1	0	0	0.40	0.40	3.20	3.21	5.29	5.31
46	1	0	0	0.46	0.46	3.74	4.06	7.25	7.53
47	1	0	0	0.44	0.44	3.80	4.18	6.85	7.04
48	1	0	0	0.43	0.43	3.26	3.54	6.52	6.74
49	1	0	0	0.86	0.86	3.25	3.25	4.99	4.99
50	1	0	0	0.37	0.37	3.29	3.56	7.25	7.48
51	1	0	0	0.53	0.53	3.63	3.64	5.76	5.77
52	1	0	0	0.35	0.35	3.14	3.42	5.45	5.85
53	1	0	0	0.38	0.39	4.01	4.33	6.63	7.05
54	0	0	0	0.67	0.73	3.94	4.57	7.00	8.09
55	0	0	0	0.35	0.37	1.81	2.00	3.35	3.64
56	1	0	0	0.49	0.49	3.72	3.73	6.09	6.10
57	1	0	0	0.34	0.34	3.78	3.78	7.37	7.39
58	1	0	1	0.40	0.42	3.62	3.82	6.76	7.10



1									
2									
3	1	0	0	0.60	0.60	3.02	3.02	4.86	4.87
4	0	0	0	0.55	0.55	2.83	2.83	5.51	5.53
5	0	0	0	0.49	0.49	2.28	2.45	3.80	4.08
6	1	0	0	0.39	0.41	4.02	4.36	6.22	6.69
7	1	0	0	0.41	0.41	4.47	4.47	7.11	7.11
8	0	0	0	0.95	0.95	3.36	3.35	5.12	5.13
9	0	0	0	0.62	0.62	2.56	2.59	5.59	5.67
10	1	0	0	0.61	0.62	2.40	2.69	3.95	4.31
11	0	0	0	0.61	0.62	2.94	2.95	4.50	4.57
12	1	0	0	0.55	0.58	2.44	2.77	3.84	4.40
13	1	0	0	0.40	0.41	3.13	3.44	5.49	6.02
14	0	0	0	0.50	0.50	2.44	2.36	3.99	3.88
15	0	0	0	0.34	0.35	3.29	3.56	6.56	6.87
16	0	0	0	0.60	0.60	4.63	4.63	7.41	7.41
17	1	0	0	0.54	0.54	2.28	2.44	4.18	4.71
18	1	0	0	0.63	0.63	2.68	2.68	5.79	5.79
19	1	0	0	0.47	0.47	3.72	3.72	6.39	6.39
20	0	0	0	0.86	0.86	3.24	3.24	4.97	4.98
21	1	0	0	1.52	1.53	3.37	3.40	5.15	5.28
22	1	0	0	0.44	0.44	4.64	4.66	7.37	7.41
23	1	0	0	0.84	0.85	2.77	2.85	4.50	4.49
24	0	0	0	1.54	1.54	3.48	3.47	5.37	5.38
25	1	0	0	0.36	0.39	1.91	2.06	3.31	3.59
26	1	0	0	0.95	0.95	3.34	3.34	5.10	5.11
27	0	0	0	0.43	0.43	3.84	4.23	6.70	7.03
28	1	0	1	0.41	0.40	3.19	3.09	4.21	4.16
29	0	0	0	0.44	0.43	2.08	1.98	3.31	3.20
30	1	0	0	0.88	0.88	3.20	3.20	5.23	5.24
31	1	0	0	0.35	0.35	3.84	3.85	7.21	7.23
32	1	0	0	0.33	0.33	1.87	1.95	3.44	3.57
33	1	0	1	0.45	0.45	3.12	3.44	5.00	5.36
34	0	0	0	0.42	0.45	3.48	3.67	4.81	5.05
35	1	0	0	0.38	0.38	3.81	3.83	7.69	7.74
36	1	0	0	0.60	0.60	2.94	2.96	4.70	4.75
37	0	0	0	0.44	0.44	2.49	2.49	4.29	4.30
38	1	0	0	0.36	0.35	1.85	1.84	3.61	3.51
39	1	0	1	0.58	0.57	2.69	2.63	4.38	4.19
40	1	0	0	0.39	0.40	1.95	2.20	3.01	3.29
41	0	0	0	0.51	0.52	2.77	2.76	4.44	4.48
42	1	0	0	1.47	1.50	3.02	3.24	5.04	5.18
43	1	0	0	0.41	0.42	3.22	3.48	4.78	5.37
44	1	0	0	0.38	0.38	3.52	3.82	6.64	6.91
45	1	0	0	0.40	0.40	3.69	3.65	6.02	6.12
46	0	0	1	0.52	0.52	3.54	3.55	6.83	6.84
47	1	0	0	0.36	0.36	3.59	3.60	6.02	6.03
48	1	0	0	0.45	0.45	3.80	4.12	7.01	7.28
49	1	0	0	0.49	0.49	2.66	2.69	5.28	5.23
50	1	0	0	0.63	0.64	2.91	2.92	4.50	4.57
51	1	0	0	0.50	0.50	2.73	2.81	5.30	5.33
52	0	0	0	0.64	0.64	4.54	4.55	7.47	7.49
53	1	0	0	0.62	0.62	3.05	3.05	4.75	4.75
54	1	0	1	0.36	0.36	2.12	2.12	3.86	3.86
55	1	0	0	0.50	0.51	2.32	2.55	3.89	4.25
56	1	0	0	0.94	0.95	3.18	3.25	4.81	4.93
57	1	0	0	0.38	0.38	3.83	3.84	7.73	7.74
58	1	0	0	0.47	0.47	4.12	3.99	6.68	6.69

1									
2									
3	0	0	0	0.62	0.63	3.72	4.14	6.70	7.08
4	1	0	0	0.54	0.57	2.38	2.71	3.77	4.30
5	1	0	0	0.45	0.46	3.59	3.61	5.71	5.74
6	1	0	0	0.41	0.41	1.69	1.78	2.82	2.82
7	1	0	0	0.43	0.43	3.81	4.23	6.77	7.07
8	0	0	0	0.60	0.60	2.59	2.61	4.24	4.28
9	1	0	1	0.36	0.36	3.69	3.69	6.20	6.21
10	0	0	0	0.40	0.39	3.08	3.37	5.19	5.53
11	0	0	0	0.51	0.51	3.17	3.17	5.67	5.68
12	1	0	0	0.64	0.63	2.41	2.57	5.35	5.51
13	0	0	0	0.34	0.34	1.79	1.94	3.31	3.58
14	1	0	0	0.31	0.32	3.49	3.53	6.21	6.31
15	0	0	0	0.86	0.86	3.24	3.24	4.97	4.98
16	1	0	0	0.55	0.56	2.41	2.71	3.94	4.34
17	1	0	0	0.39	0.39	2.74	2.62	4.23	4.10
18	1	0	0	0.34	0.35	3.24	3.58	6.21	6.73
19	0	0	0	0.64	0.66	3.72	3.72	6.99	6.91
20	1	0	0	0.44	0.44	4.63	4.66	7.35	7.42
21	0	0	0	0.38	0.38	3.81	3.83	7.69	7.74
22	1	0	0	0.39	0.39	4.01	4.02	7.15	7.18
23	0	0	0	0.61	0.62	2.39	2.70	3.92	4.33
24	1	0	0	0.53	0.56	3.43	3.58	5.63	5.80
25	1	0	0	0.84	0.86	2.77	2.97	4.58	4.88
26	1	0	0	0.66	0.69	4.41	4.59	7.31	7.69
27	0	0	0	0.84	0.86	2.82	3.08	4.36	4.73
28	1	0	0	0.29	0.30	3.30	3.57	5.85	6.38
29	1	0	0	0.34	0.34	2.19	2.19	3.41	3.41
30	1	0	0	0.60	0.61	2.61	2.84	4.32	4.72
31	0	0	0	0.76	0.78	2.38	2.66	3.98	4.29
32	1	0	0	0.43	0.43	3.78	3.82	6.91	6.98
33	1	0	0	0.57	0.57	2.94	2.93	4.59	4.61
34	1	0	0	0.45	0.46	2.22	2.41	3.89	4.30
35	1	0	0	0.86	0.86	3.24	3.24	4.98	4.98
36	1	0	0	0.52	0.50	3.17	3.16	5.34	5.20
37	1	0	0	0.93	0.94	2.90	3.12	4.49	4.79
38	1	0	0	0.47	0.46	3.31	3.33	5.32	5.23
39	0	0	0	0.49	0.50	3.16	3.20	5.65	6.01
40	1	0	1	0.57	0.57	2.99	2.99	4.71	4.72
41	1	0	0	0.85	0.86	2.77	2.97	4.61	4.87
42	0	0	0	0.57	0.58	3.84	4.24	6.81	7.07
43	1	0	0	0.39	0.41	2.99	3.35	4.08	4.60
44	1	0	0	0.34	0.36	1.75	1.93	3.24	3.51
45	1	0	0	0.84	0.85	2.80	2.85	4.49	4.46
46	0	0	0	0.86	0.86	3.25	3.25	4.99	4.99
47	1	1	1	0.45	0.46	3.61	3.62	5.74	5.76
48	0	0	0	0.59	0.59	2.67	2.67	4.33	4.30
49	1	0	0	0.46	0.46	3.77	3.77	5.74	5.75
50	0	0	0	0.40	0.38	3.31	3.15	5.04	4.82
51	1	0	0	0.49	0.50	2.95	3.24	5.47	6.14
52	1	0	0	0.55	0.55	2.84	2.84	5.55	5.56
53	1	0	0	0.58	0.60	2.60	2.82	4.20	4.55
54	0	0	0	0.45	0.45	3.81	3.83	6.57	6.59
55	1	0	1	0.45	0.47	3.40	3.66	5.21	5.58
56	1	0	0	1.48	1.50	3.03	3.22	5.11	5.15
57	1	0	0	0.42	0.42	3.71	4.09	6.82	7.10
58	0	0	0	0.86	0.86	3.18	3.19	4.87	4.90

1									
2									
3	1	0	1	0.41	0.43	2.98	3.30	4.90	5.32
4	0	0	0	0.41	0.41	2.54	2.54	4.65	4.66
5	0	0	0	0.35	0.35	3.26	3.52	6.26	6.61
6	1	0	0	0.40	0.39	3.69	4.02	5.95	6.30
7	1	0	0	0.34	0.35	1.73	1.90	3.28	3.54
8	1	0	1	0.34	0.34	1.88	1.77	3.32	3.24
9	1	0	0	0.39	0.39	2.38	2.70	4.07	4.45
10	1	0	0	0.50	0.52	3.45	3.60	5.96	6.14
11	1	0	0	0.33	0.33	2.05	1.91	3.66	3.46
12	1	0	0	0.48	0.51	3.15	3.39	5.05	5.44
13	1	0	0	0.55	0.56	2.43	2.67	3.98	4.30
14	1	0	1	0.40	0.43	3.83	4.40	6.27	7.10
15	1	0	1	0.39	0.41	2.99	3.36	4.08	4.62
16	0	0	0	0.39	0.39	2.38	2.69	4.07	4.45
17	1	0	0	0.57	0.57	3.00	3.00	4.74	4.74
18	1	0	0	0.43	0.43	3.75	3.75	5.17	5.17
19	1	0	0	0.46	0.45	4.00	3.93	7.23	7.08
20	1	0	0	0.39	0.40	2.98	3.28	4.76	5.17
21	0	0	0	0.54	0.56	2.24	2.49	4.48	4.97
22	1	0	0	0.63	0.61	2.66	2.54	4.38	4.15
23	0	0	0	0.42	0.43	2.99	3.28	4.94	5.31
24	1	0	0	0.36	0.37	3.26	3.67	5.69	6.40
25	0	0	0	0.45	0.46	4.31	4.47	7.39	7.66
26	0	0	0	0.45	0.45	3.39	3.51	6.51	6.55
27	1	0	0	0.37	0.38	3.98	4.23	6.39	6.77
28	1	0	0	0.41	0.40	2.56	2.82	4.19	4.53
29	1	0	0	0.44	0.44	2.56	2.61	4.88	4.82
30	1	0	0	0.64	0.63	2.40	2.57	5.35	5.51
31	1	0	0	0.41	0.40	2.67	2.48	4.64	4.35
32	1	0	0	0.39	0.39	3.58	3.58	5.84	5.84
33	1	0	0	0.42	0.43	3.27	3.54	6.50	6.73
34	0	0	0	0.43	0.45	4.58	4.66	7.26	7.43
35	1	0	0	0.44	0.44	3.73	3.74	5.68	5.69
36	1	0	0	0.44	0.44	3.71	4.02	6.80	7.09
37	0	0	0	0.76	0.78	2.37	2.67	3.95	4.30
38	1	0	0	0.43	0.44	3.70	3.73	5.10	5.14
39	1	0	0	0.84	0.85	2.79	3.00	4.36	4.64
40	1	0	0	0.40	0.40	3.21	3.50	6.66	6.85
41	1	0	0	0.53	0.53	2.78	2.78	4.59	4.59
42	1	0	0	0.41	0.40	2.45	2.46	4.48	4.35
43	1	0	0	0.52	0.52	2.45	2.38	3.92	3.81
44	1	0	0	0.41	0.41	3.66	4.01	6.81	7.11
45	0	0	0	0.43	0.43	3.80	4.22	6.78	7.07
46	1	0	0	0.34	0.35	1.77	1.96	3.33	3.62
47	0	0	0	0.30	0.29	2.80	3.11	5.16	5.46
48	1	0	0	0.62	0.62	3.04	3.04	4.74	4.74
49	1	0	0	0.43	0.43	3.27	3.53	6.53	6.73
50	1	0	0	0.62	0.62	3.06	3.06	5.09	5.09
51	0	0	0	0.55	0.55	3.49	3.50	5.71	5.73
52	1	0	0	0.48	0.46	3.33	3.22	5.29	5.11
53	0	0	0	1.00	1.03	2.54	2.79	4.60	4.86
54	1	0	0	0.50	0.50	4.48	4.49	7.53	7.54
55	1	0	0	0.44	0.44	3.79	3.81	6.88	6.92
56	1	0	0	0.41	0.40	3.79	4.03	5.87	6.19
57	1	0	1	0.37	0.36	3.37	3.31	6.57	6.49
58	1	0	0	0.36	0.36	2.24	2.56	3.88	4.21

1									
2									
3	1	0	0	0.34	0.34	3.06	3.05	4.84	4.85
4	0	0	0	0.55	0.57	2.40	2.57	3.72	4.00
5	1	0	1	0.49	0.49	3.73	3.73	6.10	6.10
6	1	0	0	0.66	0.67	2.31	2.56	3.95	4.33
7	1	0	0	0.52	0.52	3.63	3.63	5.75	5.76
8	1	0	0	0.54	0.54	4.19	4.26	7.73	7.85
9	1	0	0	1.49	1.52	3.03	3.23	5.35	5.67
10	1	0	0	0.43	0.43	1.96	2.06	3.29	3.33
11	1	0	0	0.46	0.46	3.74	4.06	7.25	7.53
12	1	0	0	1.00	1.03	2.54	2.79	4.61	4.86
13	1	0	0	0.63	0.63	2.73	2.73	5.68	5.68
14	1	0	0	0.38	0.36	3.20	3.04	5.22	4.98
15	0	0	0	0.48	0.50	3.14	3.38	5.07	5.44
16	1	0	0	0.38	0.38	2.12	2.12	3.70	3.71
17	1	0	0	0.67	0.69	3.74	4.20	6.83	7.55
18	0	0	0	0.34	0.34	3.86	3.88	6.88	6.93
19	0	0	0	0.41	0.40	3.24	3.15	5.50	5.33
20	1	0	0	0.39	0.41	4.16	4.37	6.65	7.01
21	1	0	0	0.38	0.38	2.71	2.99	4.50	4.91
22	1	0	0	0.50	0.52	3.05	3.31	5.26	5.77
23	1	0	0	0.48	0.49	3.43	3.43	5.59	5.59
24	1	0	0	0.87	0.87	3.17	3.16	5.16	5.18
25	1	0	0	0.40	0.40	3.82	3.84	7.07	7.10
26	1	0	1	0.63	0.64	3.80	4.15	6.54	7.04
27	1	0	0	0.43	0.45	2.05	2.19	3.23	3.46
28	0	0	0	0.40	0.40	3.22	3.22	4.97	4.98
29	1	0	0	0.34	0.32	3.22	3.20	6.77	6.24
30	1	0	0	0.54	0.54	2.72	2.73	4.32	4.35
31	1	0	0	0.39	0.39	4.38	4.40	6.70	6.72
32	0	0	0	0.34	0.34	2.54	2.79	3.93	4.35
33	1	0	0	0.60	0.61	2.62	2.83	4.36	4.69
34	0	0	0	0.54	0.54	3.64	3.64	5.83	5.83
35	1	0	0	0.36	0.37	3.25	3.55	6.94	7.21
36	1	0	0	0.51	0.51	4.21	4.48	6.90	7.39
37	0	0	1	0.62	0.62	3.05	3.05	4.75	4.75
38	1	0	0	0.60	0.61	2.46	2.76	4.05	4.40
39	1	0	0	0.64	0.63	2.37	2.50	5.54	5.63
40	0	0	0	0.45	0.46	2.18	2.39	3.56	3.90
41	1	0	0	0.95	0.95	3.35	3.35	5.11	5.12
42	1	0	0	0.40	0.43	3.68	4.32	6.54	7.45
43	1	0	0	0.54	0.55	2.23	2.44	3.64	3.87
44	1	0	0	0.40	0.40	3.07	3.08	4.86	4.92
45	0	0	0	0.61	0.63	2.92	2.97	4.78	4.89
46	0	0	0	0.38	0.38	3.08	3.09	5.06	5.07
47	1	0	0	0.49	0.50	2.96	3.23	5.47	6.13
48	1	0	0	0.39	0.39	3.70	3.72	5.94	5.98
49	1	0	0	0.40	0.40	2.54	2.82	4.16	4.54
50	1	0	0	0.49	0.50	3.12	3.38	5.30	5.77
51	1	0	0	0.59	0.60	2.60	2.80	4.24	4.52
52	1	0	0	0.60	0.61	2.47	2.75	4.07	4.40
53	1	0	0	0.57	0.57	2.98	2.97	4.68	4.69
54	0	0	0	0.60	0.61	2.62	2.83	4.36	4.70
55	0	0	0	0.25	0.27	2.29	2.55	4.62	4.94
56	1	0	1	0.30	0.32	3.08	3.45	5.55	6.16
57	1	0	0	0.44	0.44	4.64	4.66	7.37	7.41
58	1	0	0	0.31	0.31	3.36	3.49	6.00	6.08

1									
2									
3	1	0	0	0.32	0.32	2.79	2.79	5.56	5.56
4	1	0	0	0.61	0.61	3.03	3.04	4.88	4.89
5	0	0	0	0.61	0.61	2.51	2.74	4.18	4.36
6	1	0	1	0.46	0.46	3.16	3.25	5.36	5.37
7	1	0	0	0.37	0.38	2.96	3.28	4.61	5.09
8	0	0	0	0.47	0.50	3.12	3.38	5.03	5.44
9	1	0	0	0.33	0.31	3.37	3.21	6.05	5.79
10	1	0	0	0.36	0.35	3.46	3.67	6.27	6.60
11	0	0	0	0.40	0.42	2.00	2.21	2.93	3.25
12	1	0	0	0.42	0.40	2.63	2.36	4.23	4.02
13	1	0	0	0.61	0.63	3.76	3.82	6.69	6.58
14	1	0	0	0.39	0.42	3.50	4.07	6.26	7.16
15	0	0	0	0.35	0.36	3.74	3.79	7.27	7.42
16	1	0	0	0.49	0.50	2.96	3.23	5.47	6.12
17	1	0	0	0.41	0.41	3.69	4.03	6.51	6.77
18	1	0	0	0.37	0.37	2.96	2.97	4.73	4.75
19	1	0	0	0.38	0.39	1.97	2.13	3.35	3.63
20	1	0	0	1.50	1.52	3.30	3.30	5.61	5.68
21	0	0	0	0.55	0.55	2.26	2.43	3.70	3.85
22	1	0	0	0.92	0.94	2.89	3.13	4.47	4.80
23	1	0	0	0.62	0.62	3.00	2.98	4.62	4.64
24	1	0	0	0.43	0.43	3.81	4.23	6.76	7.07
25	0	0	0	0.39	0.39	4.36	4.39	6.67	6.73
26	1	0	0	0.43	0.43	3.81	3.82	6.95	6.97
27	1	0	0	0.64	0.68	3.88	4.40	6.47	7.39
28	1	0	0	0.65	0.70	3.94	4.56	6.55	7.63
29	1	0	0	0.61	0.62	3.69	4.03	6.77	6.97
30	0	0	0	0.62	0.62	3.04	3.03	4.72	4.72
31	1	0	0	0.51	0.51	2.35	2.59	3.95	4.26
32	1	0	1	0.29	0.29	2.80	3.12	5.14	5.48
33	1	0	0	0.60	0.60	2.65	2.65	4.35	4.36
34	0	0	0	0.44	0.44	3.95	3.95	6.59	6.60
35	0	0	0	0.44	0.44	3.30	3.54	6.46	6.67
36	1	0	1	0.44	0.43	3.83	3.87	6.93	6.74
37	1	0	0	0.52	0.53	3.81	4.01	7.11	7.44
38	0	0	0	0.61	0.63	2.85	2.94	4.33	4.56
39	0	0	0	0.41	0.41	2.58	2.81	4.22	4.50
40	1	0	0	0.31	0.32	3.80	3.83	6.42	6.49
41	1	0	0	0.50	0.50	3.91	3.97	7.27	7.15
42	0	0	0	0.40	0.41	2.48	2.50	3.61	3.64
43	1	0	1	0.54	0.56	2.36	2.71	3.83	4.33
44	1	0	0	0.36	0.36	2.08	2.08	3.81	3.83
45	1	0	0	0.48	0.52	3.09	3.50	4.89	5.52
46	1	0	0	0.36	0.35	3.46	3.66	6.30	6.60
47	1	0	0	0.56	0.56	2.65	2.65	4.11	4.11
48	1	0	0	0.54	0.55	2.24	2.44	3.65	3.86
49	1	0	0	0.32	0.31	3.35	3.33	5.70	5.81
50	0	0	0	0.65	0.66	4.53	4.53	8.23	8.25
51	1	0	0	0.88	0.88	3.20	3.20	5.24	5.24
52	0	0	0	0.86	0.86	3.20	3.21	4.90	4.92
53	1	0	0	0.51	0.53	3.06	3.29	5.10	5.42
54	1	0	0	0.56	0.56	2.90	2.89	4.60	4.61
55	0	0	0	0.57	0.57	2.93	2.92	4.56	4.59
56	1	0	0	0.42	0.42	3.27	3.54	6.50	6.73
57	1	0	0	0.29	0.29	2.80	3.12	5.14	5.48
58	1	0	0	0.37	0.39	3.97	4.12	6.88	7.19

1									
2									
3	1	0	0	0.49	0.49	2.25	2.47	3.75	4.11
4	1	0	0	0.38	0.37	3.13	3.07	5.48	5.34
5	1	0	0	0.59	0.57	2.84	2.60	4.43	4.09
6	0	0	0	0.61	0.63	2.66	2.91	4.40	4.80
7	0	0	0	0.40	0.40	1.91	2.14	3.08	3.31
8	0	0	0	0.61	0.62	2.97	2.98	4.88	4.93
9	1	0	0	0.44	0.45	3.92	4.16	6.67	7.08
10	1	0	1	0.40	0.40	1.97	2.20	3.07	3.37
11	0	0	0	0.35	0.36	1.76	1.92	3.27	3.47
12	0	0	0	0.88	0.88	3.20	3.20	5.23	5.24
13	1	0	0	0.85	0.86	2.81	2.82	4.80	4.71
14	1	0	0	0.39	0.39	3.50	3.77	6.92	7.11
15	0	0	0	0.38	0.38	2.38	2.72	4.18	4.59
16	0	0	0	0.84	0.86	2.77	2.98	4.56	4.89
17	1	0	0	0.87	0.87	3.19	3.19	5.21	5.22
18	1	0	0	0.50	0.50	2.45	2.36	3.99	3.87
19	1	0	0	0.36	0.36	3.81	3.81	7.50	7.51
20	1	0	0	0.40	0.41	2.25	2.27	3.41	3.44
21	0	0	0	0.37	0.37	2.14	2.14	3.90	3.91
22	0	0	0	0.95	0.95	3.31	3.30	5.03	5.05
23	1	0	0	0.39	0.39	4.00	4.33	6.56	6.99
24	1	0	1	0.43	0.43	1.94	2.08	3.25	3.34
25	1	0	0	0.40	0.40	3.43	3.31	6.81	6.62
26	1	0	0	0.66	0.67	2.32	2.56	3.99	4.33
27	1	0	0	0.58	0.59	4.17	4.37	6.43	6.92
28	1	0	0	0.40	0.39	3.69	4.04	5.95	6.32
29	0	0	0	0.45	0.45	4.49	4.49	7.80	7.80
30	1	0	0	0.84	0.86	2.77	2.98	4.57	4.89
31	0	0	0	0.40	0.40	3.81	3.83	7.06	7.10
32	1	0	0	1.47	1.50	3.02	3.24	5.03	5.19
33	0	0	0	0.59	0.60	2.60	2.81	4.21	4.54
34	1	0	0	0.35	0.35	3.13	3.42	5.44	5.86
35	0	0	0	0.39	0.40	4.04	4.08	7.58	7.66
36	0	0	0	1.44	1.48	2.84	3.10	5.42	5.57
37	1	0	0	0.39	0.39	3.74	4.08	5.91	6.31
38	1	0	0	0.36	0.36	2.82	2.82	4.88	4.88
39	1	0	0	0.54	0.55	2.23	2.44	3.63	3.87
40	1	0	0	0.36	0.36	2.91	3.18	4.86	5.23
41	1	0	0	1.53	1.53	3.43	3.43	5.25	5.32
42	1	0	0	0.38	0.38	3.83	3.84	7.73	7.74
43	1	0	0	0.60	0.61	2.62	2.84	4.34	4.71
44	1	0	0	0.34	0.36	1.75	1.93	3.24	3.50
45	1	0	0	0.40	0.41	3.23	3.52	6.62	6.83
46	1	0	1	0.32	0.32	2.39	2.58	4.79	5.14
47	1	0	0	0.25	0.26	2.23	2.42	4.50	4.77
48	1	0	0	0.39	0.39	2.53	2.80	4.04	4.44
49	0	0	0	0.42	0.45	3.35	3.66	4.63	5.04
50	1	0	0	0.62	0.62	3.04	3.04	4.73	4.73
51	0	0	0	0.66	0.64	2.51	2.54	5.53	5.47
52	0	0	0	1.51	1.52	3.31	3.32	5.63	5.69
53	0	0	0	0.39	0.39	3.83	3.84	7.09	7.10
54	1	0	0	0.66	0.66	4.49	4.51	7.51	7.57
55	0	0	0	0.79	0.79	2.96	2.95	4.63	4.64
56	1	0	0	0.65	0.68	4.42	4.63	8.01	8.45
57	0	0	0	0.48	0.50	3.13	3.38	5.06	5.45
58	1	0	0	0.53	0.53	3.63	3.64	5.77	5.77

1									
2									
3	0	0	0	0.60	0.61	2.62	2.84	4.34	4.71
4	0	0	0	0.50	0.51	2.32	2.55	3.90	4.24
5	0	0	0	0.63	0.64	3.78	4.13	6.53	7.00
6	1	0	0	0.55	0.55	3.51	3.51	5.74	5.74
7	1	0	0	0.38	0.38	3.79	3.83	7.65	7.74
8	0	0	0	0.63	0.64	3.79	4.13	7.38	7.75
9	0	0	0	0.40	0.39	2.45	2.67	4.30	4.52
10	1	0	1	0.59	0.59	2.30	2.43	5.48	5.54
11	1	0	1	0.52	0.54	4.50	4.61	7.19	7.40
12	1	0	1	0.54	0.54	2.77	2.77	4.43	4.43
13	1	0	0	0.41	0.43	2.03	2.29	3.50	3.93
14	1	0	0	0.40	0.40	3.20	3.21	4.94	4.96
15	1	0	1	0.42	0.42	3.19	3.20	5.39	5.40
16	1	0	1	0.39	0.41	3.97	4.36	6.15	6.69
17	1	0	0	0.92	0.94	2.89	3.13	4.47	4.80
18	1	0	1	0.62	0.63	3.71	4.13	6.70	7.07
19	1	0	1	0.38	0.39	1.38	1.58	2.73	2.88
20	0	0	0	0.56	0.56	2.48	2.67	4.08	4.29
21	0	0	0	0.45	0.46	4.40	4.45	7.50	7.60
22	1	0	1	0.53	0.53	3.10	3.18	5.28	5.34
23	0	0	0	0.40	0.40	3.09	3.10	4.90	4.95
24	0	0	0	0.51	0.51	3.67	3.67	6.28	6.29
25	1	0	0	0.41	0.41	1.81	2.02	2.89	3.14
26	0	0	0	0.38	0.39	4.34	4.39	6.66	6.73
27	1	0	1	0.36	0.37	1.77	1.89	3.13	3.24
28	1	0	0	0.62	0.62	3.03	3.03	4.71	4.72
29	1	0	0	0.40	0.40	3.12	3.12	4.98	4.99
30	1	0	1	0.68	0.69	4.45	4.49	7.78	7.88
31	1	0	0	0.39	0.39	2.52	2.81	4.02	4.46
32	1	0	0	1.49	1.50	3.06	3.09	5.23	5.06
33	0	0	0	0.41	0.42	2.98	3.28	4.84	5.22
34	1	0	0	0.34	0.34	3.99	4.00	6.73	6.75
35	1	0	0	0.51	0.51	3.20	3.20	5.70	5.71
36	0	0	0	0.92	0.94	2.87	3.14	4.43	4.80
37	1	0	1	0.40	0.40	3.58	3.78	5.28	5.80
38	0	0	0	0.41	0.41	1.85	2.06	2.91	3.18
39	1	0	0	0.59	0.61	2.44	2.76	4.01	4.40
40	0	0	0	0.47	0.50	3.09	3.36	4.95	5.34
41	1	0	0	0.45	0.45	3.82	4.14	6.98	7.26
42	0	0	0	0.44	0.44	3.82	4.14	7.20	7.49
43	0	0	0	0.49	0.49	2.34	2.40	3.96	4.00
44	1	0	0	0.55	0.55	2.85	2.85	5.57	5.57
45	1	0	0	0.37	0.36	2.93	3.25	5.16	5.56
46	1	0	0	0.40	0.39	3.08	3.38	5.19	5.53
47	0	0	0	0.50	0.50	3.16	3.37	5.34	5.74
48	0	0	0	0.54	0.55	3.56	3.58	6.26	6.29
49	0	0	0	0.56	0.57	2.66	2.77	4.14	4.38
50	1	0	0	0.37	0.38	4.23	4.26	6.52	6.57
51	1	0	0	0.44	0.44	3.79	3.81	6.87	6.92
52	1	0	0	0.49	0.53	3.21	3.55	5.07	5.57
53	1	0	0	0.60	0.61	2.47	2.75	4.07	4.40
54	1	0	0	0.53	0.56	2.19	2.47	4.36	4.89
55	0	0	0	0.41	0.41	4.38	4.38	7.44	7.44
56	1	0	0	0.39	0.39	2.52	2.81	4.02	4.46
57	1	0	0	0.46	0.46	3.17	3.24	5.38	5.36
58	0	0	0	0.38	0.39	3.24	3.53	6.58	6.82

1									
2									
3	1	0	1	0.60	0.60	3.02	3.02	4.86	4.87
4	0	0	0	0.34	0.36	1.75	1.93	3.23	3.51
5	0	0	0	0.40	0.40	3.19	3.20	4.93	4.95
6	0	0	1	0.35	0.35	3.44	3.74	5.96	6.64
7	1	0	0	0.35	0.34	3.30	3.23	6.32	5.96
8	0	0	0	0.95	0.95	3.36	3.36	5.13	5.13
9	1	0	0	0.42	0.43	3.30	3.44	4.96	5.45
10	0	0	0	0.51	0.49	3.15	3.14	5.35	5.18
11	1	0	0	0.84	0.86	2.74	2.99	4.50	4.90
12	1	0	0	0.87	0.87	3.20	3.19	5.22	5.23
13	1	0	0	0.95	0.94	2.95	2.92	4.82	4.66
14	0	0	0	0.60	0.60	2.64	2.65	4.35	4.36
15	1	0	0	0.36	0.36	3.68	3.68	6.18	6.20
16	0	0	0	0.43	0.45	4.49	4.65	7.15	7.43
17	0	0	0	0.40	0.40	3.22	3.23	5.33	5.34
18	1	0	0	0.39	0.39	4.36	4.39	6.68	6.73
19	0	0	0	0.51	0.55	3.00	3.33	5.01	5.49
20	1	0	0	0.34	0.36	1.75	1.93	3.24	3.50
21	1	0	0	1.51	1.52	3.32	3.33	5.66	5.70
22	1	0	0	0.26	0.26	2.60	2.60	5.04	5.04
23	1	0	0	0.49	0.49	4.28	4.30	7.81	7.85
24	1	0	0	0.39	0.39	2.52	2.81	4.02	4.46
25	0	0	0	0.40	0.40	3.21	3.50	6.66	6.84
26	0	0	0	0.41	0.41	1.73	1.95	2.88	3.07
27	1	0	1	0.55	0.55	2.60	2.60	5.24	5.25
28	0	0	0	0.44	0.45	3.96	4.06	7.00	7.18
29	1	0	1	0.40	0.41	3.74	3.76	6.55	6.60
30	1	0	0	0.52	0.52	3.62	3.64	5.81	5.83
31	1	0	0	0.35	0.37	3.24	3.69	6.67	7.46
32	0	0	0	0.66	0.67	2.33	2.55	4.01	4.32
33	0	0	0	0.51	0.51	3.15	3.15	5.64	5.65
34	1	0	0	0.48	0.48	3.42	3.42	5.56	5.58
35	1	0	0	0.66	0.68	4.43	4.57	7.35	7.66
36	1	0	0	0.68	0.70	4.39	4.53	7.65	7.96
37	1	0	0	0.63	0.61	2.66	2.54	4.37	4.15
38	1	0	0	0.52	0.52	3.62	3.63	5.73	5.75
39	1	0	1	0.57	0.58	2.45	2.51	5.44	5.55
40	0	0	0	0.51	0.51	3.17	3.17	5.66	5.67
41	1	0	0	0.50	0.50	4.46	4.50	7.50	7.57
42	0	0	0	0.60	0.62	3.72	3.91	6.92	6.88
43	1	0	1	0.64	0.66	4.46	4.61	7.29	7.60
44	1	0	0	0.36	0.36	4.15	4.16	6.65	6.66
45	1	0	0	1.52	1.52	3.37	3.37	5.74	5.75
46	0	0	0	0.51	0.51	3.26	3.30	5.38	5.38
47	1	0	0	0.38	0.39	3.73	3.82	7.49	7.72
48	0	0	0	0.32	0.32	3.17	3.42	6.12	6.39
49	1	0	1	0.43	0.43	3.80	3.82	6.95	6.98
50	0	0	0	0.39	0.40	3.21	3.52	6.64	6.87
51	1	0	0	0.94	0.95	3.22	3.25	4.88	4.95
52	0	0	0	0.63	0.63	2.73	2.73	5.68	5.68
53	0	0	0	0.85	0.86	2.77	2.95	4.63	4.84
54	1	0	0	0.87	0.87	3.16	3.14	5.11	5.14
55	1	0	1	0.49	0.50	2.70	2.96	5.23	5.48
56	1	0	0	0.40	0.40	3.10	3.10	4.92	4.96
57	0	0	0	0.25	0.26	2.23	2.41	4.50	4.77
58	1	0	0	0.38	0.37	3.27	3.14	5.68	5.47



1									
2									
3	0	0	0	0.41	0.41	2.50	2.49	4.54	4.58
4	0	0	0	0.38	0.39	2.67	2.94	4.50	4.91
5	0	0	0	0.84	0.86	2.76	2.98	4.55	4.90
6	1	0	0	1.44	1.48	2.85	3.09	5.45	5.56
7	0	0	0	0.43	0.44	3.70	3.72	5.10	5.13
8	1	0	0	0.45	0.45	3.79	3.81	6.83	6.87
9	0	0	0	0.60	0.61	2.46	2.75	4.06	4.40
10	1	0	0	0.52	0.52	2.45	2.37	3.91	3.80
11	1	0	0	0.51	0.51	3.21	3.21	5.72	5.72
12	1	0	0	0.50	0.52	2.33	2.59	3.85	4.27
13	1	0	0	0.43	0.44	2.43	2.43	4.14	4.20
14	1	0	1	0.38	0.36	3.28	3.16	5.68	5.48
15	1	0	0	0.53	0.53	3.31	3.43	5.26	5.53
16	0	0	0	1.52	1.52	3.36	3.36	5.73	5.74
17	1	0	0	1.00	1.02	2.55	2.79	4.64	4.84
18	1	0	0	0.54	0.56	2.35	2.66	3.79	4.27
19	0	0	1	0.84	0.85	2.79	2.98	4.40	4.62
20	0	0	0	0.55	0.56	2.41	2.71	3.95	4.34
21	1	0	0	0.86	0.88	2.82	3.07	4.61	5.00
22	1	0	1	0.47	0.46	3.30	3.20	5.34	5.19
23	1	0	1	0.60	0.61	2.62	2.84	4.34	4.71
24	1	0	1	0.60	0.61	2.66	2.66	4.38	4.39
25	0	0	0	0.61	0.61	2.66	2.66	4.38	4.39
26	0	0	0	1.51	1.52	3.34	3.34	5.68	5.72
27	0	0	0	0.35	0.36	3.24	3.53	6.82	7.07
28	1	0	0	0.95	0.95	3.34	3.33	5.09	5.10
29	0	0	0	0.41	0.42	2.64	2.95	4.60	5.06
30	1	0	0	0.85	0.86	2.78	2.83	4.78	4.73
31	0	0	0	0.60	0.61	2.62	2.84	4.34	4.71
32	0	0	0	1.44	1.48	2.83	3.10	5.40	5.57
33	1	0	0	0.40	0.41	3.61	3.53	5.89	6.06
34	1	0	0	0.52	0.52	3.99	4.04	7.08	6.92
35	1	0	0	0.43	0.46	3.28	3.81	6.30	7.07
36	0	0	0	0.37	0.37	2.16	2.16	3.89	3.90
37	1	0	0	0.52	0.54	3.46	3.57	5.55	5.68
38	0	0	0	0.62	0.62	3.02	3.01	4.99	5.01
39	0	0	0	0.41	0.41	2.19	2.35	3.86	4.15
40	1	0	1	0.52	0.53	2.33	2.52	3.84	4.08
41	1	0	0	0.86	0.86	3.24	3.24	4.98	4.98
42	1	0	0	0.54	0.55	2.22	2.44	3.62	3.87
43	1	0	0	0.39	0.39	3.81	3.84	7.05	7.10
44	0	0	0	0.39	0.39	3.72	3.73	5.99	5.99
45	1	0	0	0.51	0.50	3.19	3.15	5.34	5.12
46	1	0	1	0.49	0.49	3.63	3.63	5.83	5.84
47	1	0	1	0.52	0.55	3.94	4.55	6.65	7.49
48	1	0	0	0.92	0.94	2.86	3.14	4.43	4.80
49	1	0	1	0.45	0.47	3.17	3.59	4.94	5.55
50	1	0	0	0.34	0.35	3.29	3.56	6.55	6.88
51	1	0	0	0.39	0.39	4.39	4.40	6.71	6.72
52	1	0	1	0.46	0.46	3.77	3.77	5.74	5.75
53	1	0	1	0.36	0.36	4.13	4.13	6.93	6.94
54	1	0	0	0.43	0.45	2.05	2.19	3.24	3.46
55	1	0	0	0.36	0.36	3.27	3.55	6.48	6.79
56	1	0	1	0.44	0.44	2.50	2.50	4.32	4.32
57	1	0	0	0.44	0.44	3.81	3.81	6.91	6.92
58	0	0	0	0.52	0.55	3.84	4.33	7.11	7.96
59	0	0	0	0.36	0.37	2.08	2.10	3.76	3.84

1									
2									
3	1	0	0	0.54	0.55	2.23	2.44	3.63	3.87
4	0	0	0	0.40	0.40	2.26	2.26	3.43	3.43
5	1	0	0	0.42	0.41	2.81	2.71	4.50	4.30
6	1	0	1	0.41	0.41	4.43	4.45	6.75	6.78
7	0	0	0	0.40	0.42	4.35	4.46	6.90	7.10
8	1	0	1	0.56	0.57	2.69	2.77	4.19	4.38
9	0	0	0	0.45	0.46	2.20	2.41	3.87	4.32
10	1	0	1	0.39	0.39	4.38	4.40	6.70	6.72
11	0	0	0	0.53	0.55	2.40	2.65	3.78	4.22
12	1	0	0	0.55	0.55	2.60	2.60	5.24	5.25
13	1	0	0	0.44	0.47	3.00	3.35	4.84	5.41
14	1	0	0	0.69	0.69	2.79	2.79	4.67	4.67
15	1	0	0	0.46	0.46	3.77	3.77	5.74	5.75
16	0	0	0	0.53	0.53	3.63	3.64	5.82	5.83
17	0	0	0	0.41	0.41	2.55	2.55	4.67	4.67
18	1	0	0	0.41	0.40	2.57	2.82	4.20	4.52
19	1	0	0	0.52	0.53	3.61	3.63	5.68	5.71
20	1	0	1	0.53	0.53	3.63	3.64	5.77	5.77
21	1	0	1	0.55	0.56	2.44	2.67	4.02	4.30
22	1	0	0	0.36	0.37	3.82	3.85	7.31	7.37
23	0	0	0	0.37	0.37	2.97	3.21	5.21	5.49
24	1	0	0	0.61	0.61	2.66	2.66	4.38	4.39
25	1	0	0	0.35	0.37	1.84	2.04	3.34	3.67
26	0	0	0	0.42	0.41	2.65	2.36	4.26	4.03
27	1	0	1	0.39	0.39	3.29	3.29	5.36	5.36
28	0	0	0	0.58	0.60	2.20	2.44	3.68	4.04
29	1	0	1	0.48	0.49	2.29	2.37	5.21	5.33
30	1	0	0	0.54	0.54	2.75	2.75	4.38	4.39
31	1	0	0	0.53	0.54	4.20	4.22	7.78	7.81
32	1	0	1	0.60	0.60	3.03	3.03	4.87	4.87
33	0	0	0	0.44	0.44	4.58	4.64	7.63	7.74
34	1	0	0	0.40	0.40	2.52	2.83	4.11	4.56
35	1	0	0	0.34	0.34	3.78	3.78	7.38	7.39
36	0	0	0	0.39	0.40	3.00	3.09	4.98	5.12
37	1	0	0	0.55	0.55	2.59	2.59	5.22	5.23
38	1	0	0	0.52	0.52	2.69	2.71	4.42	4.46
39	1	0	0	0.55	0.55	2.85	2.85	5.56	5.57
40	0	0	0	0.56	0.55	2.38	2.28	3.83	3.68
41	0	0	0	0.46	0.46	2.52	2.53	4.54	4.60
42	0	0	0	0.41	0.44	2.98	3.33	4.74	5.34
43	1	0	0	0.53	0.53	2.77	2.77	4.58	4.58
44	1	0	0	0.66	0.69	4.38	4.62	7.24	7.73
45	0	0	0	0.41	0.40	2.56	2.90	4.01	4.50
46	1	0	0	0.75	0.77	2.47	2.60	4.14	4.17
47	0	0	0	0.59	0.60	3.71	4.08	7.48	7.86
48	1	0	0	0.43	0.43	3.88	4.25	6.64	7.00
49	0	0	0	0.58	0.60	2.60	2.82	4.20	4.55
50	1	0	0	0.36	0.37	3.76	3.84	7.22	7.36
51	0	0	0	0.37	0.37	3.30	3.48	7.09	7.12
52	0	0	0	0.50	0.51	2.32	2.54	3.91	4.24
53	1	0	0	0.87	0.87	3.18	3.17	5.19	5.20
54	1	0	0	0.37	0.38	2.97	3.29	4.61	5.10
55	1	0	1	0.50	0.53	3.44	3.55	5.41	5.56
56	0	0	0	0.85	0.86	3.17	3.19	4.85	4.89
57	1	0	0	0.87	0.88	2.96	3.13	4.78	5.09
58	1	0	0	0.69	0.69	2.80	2.80	4.68	4.68

1									
2									
3	1	0	1	0.52	0.51	3.24	3.20	5.44	5.25
4	1	0	0	0.56	0.55	2.42	2.43	4.26	4.60
5	0	0	0	0.46	0.46	3.62	3.62	5.75	5.76
6	1	0	1	0.37	0.37	3.79	3.84	7.03	7.11
7	1	0	0	0.53	0.54	2.25	2.44	4.17	4.72
8	0	0	0	0.40	0.39	3.69	4.04	5.95	6.32
9	0	0	0	0.50	0.53	3.33	3.56	5.31	5.61
10	1	0	0	0.63	0.63	2.71	2.71	5.64	5.66
11	0	0	0	0.60	0.60	2.95	2.97	4.73	4.77
12	1	0	0	0.43	0.43	3.75	3.75	5.16	5.17
13	0	0	0	1.44	1.47	2.89	3.08	5.53	5.54
14	1	0	0	0.62	0.62	3.05	3.05	4.75	4.75
15	0	0	0	0.53	0.52	2.96	2.94	5.34	5.19
16	1	0	0	0.47	0.48	2.45	2.56	5.15	5.15
17	0	0	0	0.85	0.86	2.77	2.97	4.61	4.87
18	0	0	0	0.40	0.41	2.19	2.24	3.29	3.37
19	1	0	0	0.56	0.56	2.65	2.65	4.10	4.11
20	1	0	0	0.35	0.36	2.01	2.04	3.66	3.74
21	1	0	0	0.51	0.52	4.20	3.99	6.55	6.82
22	1	0	1	0.37	0.36	2.32	2.27	3.93	3.87
23	1	0	0	0.35	0.37	1.77	1.98	3.30	3.62
24	1	0	1	0.40	0.41	2.99	3.05	4.71	4.85
25	1	0	0	0.36	0.36	2.26	2.55	3.90	4.20
26	1	0	1	0.87	0.87	3.19	3.18	5.20	5.21
27	1	0	1	0.50	0.51	2.32	2.54	3.92	4.24
28	1	0	0	0.51	0.51	4.18	4.50	6.83	7.39
29	1	0	1	0.34	0.35	3.67	3.87	6.38	6.80
30	1	0	0	0.36	0.36	3.59	3.59	6.01	6.03
31	0	0	0	0.43	0.43	3.80	4.21	6.78	7.06
32	1	0	0	0.61	0.61	2.57	2.70	4.31	4.32
33	1	0	0	0.40	0.40	3.24	3.24	5.00	5.01
34	1	0	0	0.50	0.50	4.48	4.49	7.52	7.55
35	1	0	0	1.44	1.48	2.82	3.10	5.38	5.57
36	0	0	1	0.61	0.62	2.38	2.70	3.91	4.33
37	1	0	0	0.83	0.85	2.79	3.02	4.34	4.66
38	1	0	1	0.38	0.39	4.01	4.32	6.59	7.01
39	1	0	1	0.52	0.52	4.19	3.96	6.84	6.93
40	1	0	1	0.50	0.51	2.33	2.53	3.94	4.22
41	1	0	1	0.41	0.42	3.50	3.57	5.44	5.54
42	1	0	1	0.43	0.43	1.92	2.09	3.21	3.36
43	1	0	0	0.63	0.61	2.65	2.53	4.36	4.15
44	1	0	0	0.51	0.49	3.20	3.12	5.36	5.10
45	1	0	0	0.85	0.86	2.79	2.83	4.79	4.72
46	1	0	0	0.88	0.88	3.21	3.21	5.25	5.25
47	1	0	0	0.45	0.46	3.60	3.61	5.71	5.74
48	1	0	0	0.52	0.52	2.46	2.58	4.14	4.21
49	1	0	0	0.55	0.55	2.30	2.39	3.81	3.82
50	1	0	0	0.52	0.49	3.11	3.10	5.21	5.06
51	1	0	0	0.60	0.60	3.03	3.03	4.87	4.87
52	1	0	1	0.61	0.62	3.75	3.78	6.66	6.58
53	1	0	0	0.64	0.64	3.02	3.01	4.75	4.75
54	1	0	1	0.87	0.87	3.14	3.14	5.09	5.13
55	1	0	0	0.52	0.53	3.60	3.62	5.67	5.70
56	0	0	1	0.95	0.95	3.35	3.35	5.11	5.12
57	1	0	1	0.34	0.35	1.80	1.99	3.52	3.83
58	1	0	0	0.76	0.78	2.39	2.66	3.99	4.29

1									
2									
3	0	0	0	0.38	0.39	2.98	3.01	4.61	4.73
4	1	1	1	0.53	0.55	2.19	2.46	4.33	4.87
5	1	0	0	0.40	0.40	3.23	3.23	4.99	4.99
6	1	0	0	0.51	0.49	3.11	3.09	5.24	5.08
7	1	0	1	0.34	0.34	1.73	1.77	3.33	3.32
8	1	0	0	0.66	0.67	2.38	2.53	4.10	4.26
9	1	0	0	0.47	0.49	3.28	3.34	5.34	5.45
10	1	0	0	0.32	0.32	2.79	2.79	5.55	5.56
11	1	0	0	0.87	0.88	3.06	3.11	4.92	5.06
12	1	0	0	0.63	0.64	3.80	4.15	6.54	7.04
13	1	0	0	0.62	0.61	2.52	2.44	4.18	4.02
14	1	0	1	0.88	0.88	3.20	3.20	5.24	5.25
15	1	0	0	0.57	0.57	3.00	2.99	4.73	4.73
16	1	0	0	0.41	0.43	2.98	3.29	4.91	5.32
17	0	0	0	0.60	0.60	2.68	2.65	4.56	4.45
18	1	0	1	0.60	0.61	2.47	2.75	4.08	4.40
19	1	0	1	0.52	0.53	2.39	2.43	3.97	3.91
20	1	0	1	0.42	0.43	2.99	3.28	4.95	5.31
21	1	0	0	0.62	0.62	3.06	3.05	5.08	5.08
22	0	0	0	0.39	0.40	3.43	3.81	6.12	6.76
23	1	0	0	0.95	0.93	2.96	2.91	4.88	4.66
24	1	0	0	0.46	0.46	3.63	3.63	5.77	5.77
25	1	0	0	0.54	0.56	3.52	3.60	5.76	5.84
26	1	0	0	0.47	0.52	3.07	3.47	4.86	5.49
27	0	0	0	0.56	0.57	3.90	3.99	7.12	6.91
28	0	0	0	0.45	0.47	3.61	3.69	5.46	5.61
29	1	0	1	0.60	0.60	2.99	3.00	4.80	4.82
30	1	0	0	0.56	0.56	2.66	2.66	4.12	4.13
31	1	0	1	0.39	0.39	4.37	4.39	6.69	6.73
32	1	0	1	0.93	0.95	2.57	2.82	4.56	4.83
33	1	0	0	0.50	0.52	2.35	2.60	3.84	4.27
34	1	1	1	0.41	0.43	2.05	2.26	3.60	3.93
35	1	0	0	0.40	0.40	3.83	3.83	7.04	7.04
36	1	0	0	0.52	0.51	2.94	3.00	5.22	5.16
37	1	0	0	0.44	0.44	2.49	2.48	4.28	4.29
38	1	0	0	0.43	0.43	1.94	2.08	3.24	3.34
39	1	0	0	0.40	0.40	3.75	4.13	6.20	6.74
40	0	0	0	0.63	0.64	3.79	4.13	7.38	7.74
41	0	0	0	0.43	0.43	3.97	4.07	7.07	7.13
42	1	0	0	0.45	0.47	2.85	3.13	4.94	5.25
43	1	0	0	0.50	0.52	3.53	3.62	6.08	6.19
44	1	0	1	0.63	0.63	2.69	2.69	5.62	5.63
45	1	0	0	0.34	0.34	3.78	3.78	7.38	7.39
46	1	0	0	0.34	0.33	3.39	3.26	6.20	5.89
47	0	0	0	0.44	0.44	3.31	3.53	6.48	6.65
48	1	0	0	0.62	0.62	2.55	2.49	4.18	4.03
49	1	0	1	0.54	0.56	2.22	2.47	3.53	3.89
50	1	0	0	0.45	0.46	4.42	4.45	7.52	7.58
51	1	0	0	0.41	0.41	1.64	1.83	2.88	2.96
52	1	0	0	0.41	0.40	2.79	2.65	4.36	4.22
53	0	0	0	0.50	0.53	2.78	3.06	5.24	5.59
54	1	0	1	0.46	0.46	4.43	4.43	7.51	7.52
55	1	0	1	0.39	0.41	4.58	4.81	7.18	7.62
56	1	0	0	0.86	0.86	3.23	3.23	4.95	4.96
57	1	0	1	0.55	0.53	3.27	3.24	5.55	5.33
58	1	0	0	0.55	0.56	2.42	2.67	3.97	4.30

1									
2									
3	0	0	0	0.36	0.37	4.09	4.14	6.79	6.92
4	1	0	0	0.41	0.41	3.80	3.83	7.02	7.07
5	1	0	1	0.56	0.56	2.90	2.90	4.61	4.62
6	1	0	0	0.61	0.61	2.71	2.69	4.55	4.48
7	1	0	1	0.85	0.86	3.13	3.17	4.78	4.84
8	1	0	1	0.58	0.60	2.36	2.34	3.92	3.86
9	0	0	0	0.54	0.54	4.19	4.26	7.72	7.85
10	1	0	0	0.38	0.38	3.04	3.05	4.98	5.00
11	0	0	0	0.35	0.36	3.87	3.94	7.06	7.24
12	1	0	0	0.36	0.38	1.97	2.06	3.42	3.59
13	0	0	0	0.51	0.51	3.67	3.67	6.29	6.29
14	1	0	0	0.37	0.38	3.29	3.63	5.87	6.47
15	1	0	1	0.55	0.55	2.36	2.44	4.21	4.65
16	1	0	0	0.49	0.51	2.92	3.26	5.61	6.24
17	1	0	0	0.38	0.39	3.69	3.82	7.40	7.71
18	1	0	0	0.34	0.35	1.81	1.97	3.29	3.59
19	1	0	1	0.87	0.88	3.02	3.12	4.87	5.07
20	1	0	1	0.47	0.47	3.18	3.19	5.46	5.49
21	1	0	0	0.41	0.41	4.48	4.48	7.12	7.14
22	0	0	0	0.39	0.41	1.47	1.69	2.61	2.92
23	0	0	0	0.64	0.66	4.46	4.61	7.29	7.60
24	1	0	1	0.54	0.54	4.19	4.25	7.75	7.83
25	1	0	0	0.51	0.51	2.33	2.51	3.98	4.19
26	1	0	1	0.92	0.94	2.90	3.13	4.48	4.80
27	1	0	1	0.51	0.51	3.19	3.20	5.70	5.71
28	1	0	1	0.50	0.50	3.99	3.85	7.16	6.97
29	1	0	0	0.45	0.45	3.32	3.55	6.41	6.63
30	1	0	1	0.55	0.55	2.83	2.83	5.52	5.54
31	0	0	0	0.39	0.39	2.60	2.59	4.49	4.51
32	0	0	0	0.39	0.40	4.63	4.66	7.41	7.47
33	1	0	0	0.42	0.42	3.28	3.53	6.51	6.71
34	1	0	0	0.60	0.61	2.62	2.84	4.34	4.71
35	1	0	1	0.65	0.69	4.08	4.65	7.54	8.56
36	1	0	0	0.39	0.38	2.40	2.71	4.21	4.57
37	1	0	1	0.44	0.44	2.49	2.49	4.29	4.30
38	0	0	0	0.66	0.67	2.33	2.56	4.00	4.33
39	1	0	1	0.39	0.42	4.57	4.86	7.18	7.71
40	0	0	0	0.61	0.61	3.05	3.05	4.90	4.90
41	1	0	1	0.84	0.85	2.76	2.90	4.48	4.56
42	0	0	0	1.47	1.50	3.02	3.25	5.01	5.19
43	1	0	0	0.29	0.31	3.18	3.50	5.62	6.19
44	1	0	1	0.35	0.35	1.32	1.29	3.25	3.09
45	0	0	0	0.95	0.95	3.36	3.36	5.13	5.13
46	1	0	0	0.59	0.60	2.60	2.81	4.22	4.53
47	1	0	1	0.52	0.52	3.63	3.63	5.76	5.76
48	1	0	1	0.42	0.40	3.30	3.18	5.50	5.32
49	1	0	0	0.52	0.53	3.50	3.58	5.60	5.71
50	1	0	0	0.64	0.64	4.53	4.58	7.42	7.52
51	1	0	1	0.45	0.46	4.43	4.45	7.55	7.57
52	1	0	0	1.53	1.53	3.46	3.46	5.34	5.36
53	1	0	0	0.52	0.52	2.98	3.01	5.33	5.25
54	1	0	1	0.62	0.64	3.73	4.04	6.53	6.87
55	1	1	1	0.60	0.61	2.63	2.82	4.37	4.69
56	1	0	1	0.63	0.64	3.80	4.16	7.40	7.80
57	1	0	0	0.45	0.45	4.29	4.34	7.33	7.43
58	1	0	0	0.38	0.39	2.54	2.83	4.20	4.66

1									
2									
3	1	0	0	0.37	0.37	3.78	3.83	7.01	7.11
4	0	0	0	0.61	0.61	2.66	2.66	4.39	4.39
5	1	0	0	0.40	0.40	2.56	2.84	4.36	4.78
6	1	0	0	0.63	0.64	3.78	4.13	6.53	7.01
7	1	0	0	0.61	0.61	2.68	2.68	4.41	4.41
8	1	0	0	0.93	0.95	2.57	2.82	4.54	4.83
9	1	0	0	0.41	0.40	3.66	3.70	6.10	6.00
10	1	0	0	0.33	0.33	1.87	1.95	3.44	3.57
11	1	0	0	0.50	0.53	2.34	2.60	3.86	4.28
12	1	0	0	0.34	0.34	2.08	2.08	3.89	3.90
13	1	0	0	0.33	0.32	3.23	3.45	6.05	6.33
14	0	0	0	0.66	0.67	2.33	2.56	4.00	4.33
15	1	0	1	0.51	0.51	3.67	3.67	6.28	6.29
16	1	0	0	0.51	0.50	3.24	3.19	5.47	5.24
17	1	0	0	0.57	0.56	2.64	2.66	4.33	4.24
18	1	0	1	0.52	0.53	3.81	4.00	7.09	7.41
19	0	0	0	0.36	0.36	3.04	3.35	5.30	5.72
20	1	0	1	0.44	0.44	3.80	3.81	6.90	6.92
21	1	0	1	0.37	0.39	2.66	2.98	4.40	4.91
22	1	0	0	0.47	0.47	3.22	3.23	5.52	5.53
23	1	0	0	0.39	0.39	3.81	3.84	7.06	7.10
24	1	0	1	0.50	0.50	4.48	4.49	7.53	7.54
25	1	0	0	1.51	1.52	3.36	3.36	5.72	5.73
26	1	0	1	0.63	0.64	3.79	4.14	6.54	7.03
27	1	0	0	0.45	0.45	3.80	4.12	7.01	7.28
28	0	0	0	1.47	1.50	3.02	3.25	5.01	5.19
29	0	0	0	0.62	0.62	3.02	3.01	4.99	5.01
30	1	0	1	0.66	0.66	2.53	2.43	4.20	4.07
31	1	0	1	1.45	1.48	2.80	3.10	5.33	5.56
32	1	0	1	0.45	0.46	2.20	2.41	3.86	4.32
33	0	0	0	1.50	1.52	3.28	3.29	5.58	5.67
34	1	0	0	0.37	0.38	2.96	3.29	4.66	5.13
35	0	0	0	0.59	0.59	2.29	2.40	3.84	3.97
36	1	0	1	0.37	0.38	3.32	3.53	7.37	7.45
37	1	0	1	0.50	0.50	4.46	4.49	7.51	7.56
38	1	0	1	1.47	1.50	3.02	3.25	5.00	5.19
39	1	0	0	0.42	0.42	3.20	3.20	5.39	5.40
40	1	0	1	0.34	0.35	1.79	2.00	3.49	3.82
41	1	0	0	0.64	0.64	4.54	4.57	7.44	7.50
42	1	0	0	0.43	0.44	2.44	2.44	4.16	4.21
43	0	0	0	0.40	0.39	3.69	4.04	5.95	6.33
44	1	0	0	0.64	0.63	2.41	2.57	5.35	5.51
45	1	0	1	0.63	0.63	2.35	2.51	5.50	5.64
46	1	0	0	0.55	0.55	3.52	3.52	5.75	5.75
47	1	0	0	0.65	0.64	2.42	2.56	5.39	5.50
48	1	0	0	0.59	0.61	2.42	2.76	3.93	4.39
49	1	0	1	0.40	0.40	2.53	2.83	4.14	4.55
50	0	0	0	0.84	0.86	2.77	2.86	4.77	4.76
51	1	0	0	0.50	0.49	3.19	3.18	5.36	5.19
52	1	0	0	0.40	0.40	2.53	2.83	4.12	4.56
53	0	0	1	0.38	0.38	3.82	3.84	7.70	7.74
54	1	0	1	0.39	0.41	2.06	2.33	3.80	4.28
55	1	0	1	0.64	0.64	3.03	3.03	4.77	4.77
56	1	0	1	0.54	0.54	4.20	4.23	7.77	7.82
57	1	0	1	0.41	0.43	2.03	2.28	3.52	3.94
58	0	0	1	1.44	1.47	2.86	3.09	5.47	5.56

1									
2									
3	1	0	0	1.05	1.05	3.05	3.05	5.12	5.12
4	1	0	0	0.41	0.41	1.60	1.80	2.86	2.88
5	1	0	1	0.65	0.67	3.63	4.00	6.89	7.26
6	1	1	1	0.79	0.79	2.95	2.95	4.63	4.63
7	1	0	0	0.58	0.58	2.61	2.61	5.68	5.68
8	1	0	1	0.69	0.69	2.80	2.80	4.68	4.68
9	0	0	0	0.66	0.68	2.41	2.69	4.01	4.31
10	0	0	0	0.36	0.37	3.24	3.55	6.95	7.40
11	0	0	0	0.38	0.38	3.39	3.49	7.60	7.40
12	0	0	0	0.43	0.43	1.90	2.09	3.18	3.37
13	1	0	0	0.43	0.44	2.40	2.42	4.08	4.17
14	1	0	1	0.35	0.36	1.75	1.94	3.15	3.43
15	0	0	0	0.52	0.52	3.88	4.21	6.81	7.03
16	0	0	0	0.35	0.37	3.47	3.59	5.80	6.05
17	1	0	0	0.53	0.53	3.63	3.63	5.73	5.73
18	0	0	0	0.54	0.54	2.75	2.75	4.38	4.39
19	1	0	0	1.51	1.52	3.35	3.35	5.71	5.73
20	1	0	0	0.33	0.34	3.24	3.51	6.89	7.13
21	1	0	0	0.63	0.61	2.61	2.52	4.33	4.15
22	0	0	0	0.32	0.35	1.80	2.01	3.66	4.07
23	0	0	0	0.61	0.62	2.96	2.97	4.87	4.92
24	0	0	0	0.52	0.52	3.54	3.55	6.83	6.84
25	0	0	0	0.55	0.56	2.52	2.56	3.88	3.97
26	0	0	0	0.38	0.38	2.69	2.94	4.45	4.84
27	0	0	0	0.95	0.95	3.34	3.34	5.10	5.11
28	0	0	0	0.95	0.95	3.30	3.29	5.00	5.03
29	1	0	0	0.59	0.60	3.71	4.06	7.48	7.82
30	1	0	0	0.62	0.63	2.89	2.97	4.73	4.89
31	0	0	0	0.33	0.32	3.23	3.45	6.05	6.33
32	0	0	0	1.43	1.46	3.08	2.98	5.74	5.51
33	0	0	0	0.43	0.43	2.26	2.26	3.51	3.53
34	0	0	0	0.60	0.61	2.63	2.82	4.37	4.69
35	1	0	0	0.35	0.35	3.94	3.95	7.25	7.26
36	1	0	0	0.61	0.62	2.99	2.97	4.60	4.62
37	0	0	0	0.64	0.63	2.37	2.50	5.56	5.63
38	1	0	0	0.41	0.41	3.27	3.48	6.68	6.77
39	1	0	0	0.46	0.46	3.75	3.76	5.71	5.73
40	1	0	1	0.39	0.39	1.69	1.69	2.73	2.75
41	1	0	0	0.35	0.36	1.76	1.92	3.19	3.41
42	1	0	0	0.41	0.41	1.64	1.78	2.85	2.84
43	1	0	0	0.85	0.86	3.14	3.17	4.80	4.85
44	1	0	0	0.47	0.50	3.09	3.36	4.95	5.34
45	1	0	0	0.44	0.43	3.81	3.86	6.87	6.74
46	1	0	0	0.41	0.43	2.98	3.30	4.90	5.33
47	1	0	0	0.48	0.48	4.37	4.37	7.58	7.59
48	1	0	0	0.44	0.44	3.29	3.55	6.46	6.68
49	0	0	0	0.30	0.31	3.22	3.49	5.70	6.18
50	0	0	0	0.34	0.35	1.75	1.82	3.43	3.45
51	1	0	0	0.61	0.63	2.76	2.95	4.22	4.60
52	1	0	0	0.95	0.95	3.35	3.34	5.10	5.11
53	0	0	0	0.54	0.54	2.29	2.44	4.18	4.70
54	1	0	0	0.65	0.67	3.65	4.05	6.90	7.36
55	1	0	0	0.61	0.61	2.66	2.66	4.37	4.38
56	1	0	0	0.56	0.58	3.91	4.07	6.62	6.57
57	0	0	0	0.69	0.69	2.99	2.98	4.68	4.69
58	0	0	0	0.44	0.44	3.81	3.81	6.91	6.92

1									
2									
3	1	0	0	0.53	0.53	3.62	3.63	5.75	5.77
4	0	0	0	0.45	0.46	3.58	3.60	5.68	5.72
5	1	0	0	0.63	0.63	2.68	2.68	5.61	5.62
6	1	0	0	0.64	0.66	3.90	4.33	7.39	8.09
7	0	0	0	0.52	0.52	2.44	2.37	3.90	3.80
8	1	0	0	0.43	0.43	3.81	4.22	6.77	7.07
9	1	0	0	0.49	0.52	2.92	3.28	5.65	6.30
10	1	0	0	0.41	0.40	3.61	3.66	6.02	5.97
11	1	0	1	0.51	0.53	3.06	3.29	5.10	5.42
12	1	0	0	0.43	0.42	3.13	3.22	5.13	5.16
13	1	0	0	0.44	0.45	3.11	3.43	4.97	5.35
14	1	0	0	0.51	0.51	4.18	4.49	6.83	7.39
15	0	0	0	0.35	0.36	1.75	1.94	3.17	3.44
16	0	0	0	0.45	0.46	3.13	3.52	4.92	5.48
17	0	0	0	0.65	0.66	4.52	4.54	8.21	8.27
18	0	0	0	0.61	0.61	2.66	2.66	4.37	4.38
19	0	0	0	0.36	0.37	3.33	3.40	5.55	5.69
20	1	0	0	0.59	0.59	2.27	2.41	3.80	3.98
21	1	0	0	0.60	0.61	2.49	2.75	4.12	4.38
22	1	0	0	0.85	0.87	2.93	3.16	4.46	4.85
23	0	0	0	0.36	0.36	3.60	3.60	6.03	6.03
24	1	0	0	0.56	0.56	2.90	2.89	4.60	4.61
25	0	0	0	0.65	0.66	4.53	4.53	8.23	8.25
26	0	0	0	0.40	0.39	2.62	2.52	4.62	4.36
27	0	0	0	0.52	0.54	2.30	2.58	4.74	5.12
28	0	0	0	0.34	0.35	1.75	1.90	3.32	3.53
29	1	0	0	0.46	0.46	3.77	3.77	5.74	5.75
30	1	0	0	0.62	0.62	3.03	3.02	4.70	4.71
31	1	0	0	0.87	0.88	3.05	3.11	4.91	5.06
32	0	0	0	0.42	0.41	2.81	2.71	4.50	4.30
33	1	0	0	0.37	0.38	4.01	4.25	6.29	6.83
34	1	0	0	0.40	0.42	2.97	3.29	4.81	5.23
35	0	0	0	0.59	0.59	2.62	2.69	4.34	4.35
36	1	0	0	0.33	0.33	2.47	2.73	3.86	4.36
37	0	0	0	0.69	0.69	2.79	2.79	4.67	4.67
38	1	0	0	0.32	0.32	3.66	3.69	6.56	6.64
39	1	0	0	0.95	0.95	3.35	3.35	5.11	5.12
40	1	0	0	0.41	0.41	3.37	3.42	6.82	6.73
41	0	0	0	0.52	0.52	3.54	3.55	6.83	6.84
42	0	0	0	1.01	1.03	2.51	2.79	4.55	4.85
43	0	0	0	0.30	0.31	3.12	3.38	5.54	6.08
44	0	0	0	0.44	0.43	3.82	3.86	6.89	6.74
45	0	0	0	0.63	0.61	2.63	2.59	4.33	4.18
46	1	0	0	0.46	0.46	3.63	3.63	5.77	5.77
47	1	0	0	0.55	0.55	3.65	3.65	5.93	5.93
48	0	0	0	0.36	0.36	1.80	1.92	3.42	3.53
49	1	0	0	1.48	1.50	3.03	3.20	5.13	5.14
50	1	0	0	0.40	0.40	3.11	3.42	5.48	6.01
51	1	0	0	0.39	0.39	2.91	3.23	5.02	5.41
52	1	0	0	0.66	0.68	4.42	4.58	7.34	7.67
53	0	0	0	0.40	0.40	3.83	3.84	7.09	7.10
54	1	0	0	0.44	0.44	3.78	3.81	6.87	6.92
55	1	0	1	0.60	0.61	2.62	2.84	4.35	4.71
56	1	0	0	0.40	0.40	2.25	2.26	3.42	3.43
57	0	0	0	0.34	0.36	1.75	1.94	3.23	3.51
58	0	0	0	0.41	0.40	3.77	3.84	6.24	6.16



1									
2									
3	1	0	0	0.55	0.55	2.57	2.57	5.18	5.20
4	1	0	0	0.46	0.46	3.77	3.77	5.74	5.75
5	1	0	0	0.58	0.60	2.60	2.82	4.20	4.55
6	0	0	0	0.62	0.61	2.59	2.64	4.31	4.23
7	0	0	0	0.62	0.62	3.06	3.05	5.08	5.09
8	1	0	0	0.60	0.63	4.39	4.74	7.06	7.67
9	1	0	0	0.31	0.31	3.48	3.49	6.15	6.19
10	0	0	0	0.40	0.41	3.63	3.66	5.72	5.79
11	0	0	0	0.62	0.64	3.76	4.11	6.51	6.97
12	0	0	0	0.41	0.41	1.83	2.04	2.88	3.16
13	0	0	0	0.66	0.67	3.66	4.06	6.91	7.37
14	0	0	0	0.51	0.53	3.27	3.45	5.20	5.55
15	1	0	0	0.47	0.46	3.32	3.26	5.30	5.15
16	0	0	0	0.38	0.38	2.33	2.66	4.05	4.43
17	1	0	0	0.64	0.63	2.40	2.57	5.34	5.51
18	0	0	0	0.44	0.43	3.81	3.86	6.87	6.74
19	1	0	0	0.47	0.50	3.09	3.35	4.98	5.36
20	0	0	0	0.44	0.44	3.56	3.59	5.57	5.63
21	0	0	0	0.47	0.46	3.33	3.24	5.31	5.12
22	1	0	0	0.44	0.44	4.63	4.66	7.33	7.42
23	0	0	0	0.33	0.32	2.58	2.52	5.05	4.98
24	1	0	0	0.95	0.94	2.95	2.92	4.83	4.66
25	1	0	0	0.42	0.43	3.59	3.87	6.31	6.79
26	0	0	0	0.48	0.50	3.10	3.34	5.02	5.35
27	0	0	0	0.40	0.40	3.13	3.13	5.01	5.02
28	1	0	1	0.62	0.64	2.78	2.99	4.55	4.92
29	1	0	0	0.56	0.55	2.47	2.65	5.00	5.27
30	1	0	0	0.64	0.63	2.41	2.57	5.36	5.51
31	0	0	1	0.84	0.85	2.76	2.92	4.46	4.57
32	1	0	0	0.58	0.57	2.66	2.55	4.30	4.08
33	0	0	0	0.84	0.85	2.79	3.01	4.35	4.65
34	0	0	0	0.36	0.36	3.59	3.60	6.02	6.03
35	0	0	0	0.51	0.49	3.19	3.15	5.37	5.14
36	1	0	1	0.41	0.40	3.73	3.73	6.19	6.03
37	0	0	0	0.63	0.63	2.38	2.53	4.93	5.27
38	0	0	0	0.94	0.97	2.51	2.76	4.62	4.87
39	1	0	0	1.51	1.52	3.34	3.34	5.69	5.72
40	0	0	0	0.63	0.63	2.55	2.62	5.38	5.55
41	0	0	0	0.33	0.32	3.21	3.38	5.83	6.07
42	0	0	0	0.38	0.38	3.06	3.06	5.00	5.01
43	1	0	1	0.39	0.37	3.08	2.94	5.17	5.00
44	0	0	0	1.51	1.50	3.13	3.08	5.24	5.07
45	1	0	0	0.60	0.61	2.59	2.85	4.29	4.72
46	0	0	0	0.40	0.39	3.69	4.04	5.95	6.32
47	0	0	0	0.39	0.40	3.75	4.13	5.90	6.38
48	1	0	0	0.47	0.50	3.11	3.37	4.99	5.38
49	1	0	0	0.62	0.62	3.03	3.02	4.71	4.71
50	0	0	0	0.42	0.43	1.90	2.10	3.17	3.38
51	0	0	0	0.39	0.39	4.37	4.39	6.69	6.73
52	0	0	0	0.49	0.49	2.26	2.47	3.76	4.10
53	1	0	0	0.44	0.45	3.11	3.44	5.00	5.37
54	1	0	1	0.48	0.49	3.42	3.43	5.57	5.58
55	1	0	0	0.60	0.61	2.62	2.84	4.35	4.71
56	0	0	0	0.50	0.50	2.46	2.39	4.02	3.93
57	1	0	0	0.47	0.46	3.25	3.18	5.26	5.12
58	0	0	0	0.54	0.54	2.78	2.78	4.44	4.44

1									
2									
3	0	0	0	0.42	0.42	3.83	3.72	6.06	6.21
4	1	0	1	0.55	0.55	3.51	3.51	5.74	5.74
5	1	0	0	0.45	0.45	3.28	3.54	6.35	6.59
6	0	0	0	0.40	0.40	3.69	4.04	6.35	6.70
7	1	0	0	0.36	0.36	3.73	3.73	6.28	6.29
8	0	0	0	0.94	0.94	2.86	2.93	4.67	4.66
9	0	0	0	1.48	1.50	3.04	3.18	5.17	5.13
10	1	0	0	0.95	0.99	2.71	2.95	4.57	4.97
11	1	0	0	0.95	0.95	3.36	3.35	5.12	5.13
12	1	0	0	0.41	0.41	4.48	4.48	7.13	7.14
13	1	0	1	0.33	0.35	3.50	3.75	6.84	7.36
14	1	0	0	0.49	0.53	2.91	3.35	5.71	6.44
15	0	0	0	0.44	0.44	4.64	4.66	7.37	7.41
16	1	0	0	0.41	0.40	3.69	3.72	6.14	6.02
17	1	0	0	0.36	0.39	3.55	3.98	6.31	7.03
18	1	0	0	0.39	0.39	3.69	3.71	5.93	5.98
19	1	0	0	0.51	0.51	3.19	3.19	5.69	5.70
20	0	0	0	0.60	0.61	2.47	2.75	4.09	4.39
21	0	0	0	0.56	0.58	2.55	2.79	3.97	4.42
22	1	0	0	1.05	1.05	3.05	3.05	5.12	5.12
23	0	0	0	1.44	1.48	2.84	3.10	5.42	5.57
24	1	0	0	0.44	0.44	3.95	3.95	6.59	6.60
25	0	0	0	0.52	0.52	3.63	3.63	5.76	5.76
26	0	0	0	0.85	0.86	2.77	2.90	4.73	4.81
27	0	0	0	0.45	0.43	3.11	3.04	5.18	5.03
28	0	0	0	0.49	0.50	2.71	2.96	5.24	5.48
29	1	0	0	0.44	0.45	4.53	4.56	7.72	7.77
30	1	0	0	0.60	0.61	2.62	2.83	4.35	4.70
31	0	0	0	0.29	0.30	3.32	3.34	5.62	5.69
32	0	0	0	0.40	0.40	3.21	3.50	6.66	6.85
33	0	0	0	0.55	0.55	3.50	3.51	5.72	5.73
34	1	0	0	0.58	0.60	2.60	2.82	4.20	4.55
35	1	0	0	0.36	0.36	1.79	1.86	3.29	3.31
36	1	0	0	0.53	0.53	3.63	3.63	5.72	5.73
37	0	0	0	0.53	0.54	4.20	4.23	7.77	7.81
38	0	0	0	0.86	0.86	3.22	3.22	4.94	4.95
39	0	0	0	0.39	0.39	3.26	3.28	5.32	5.34
40	1	0	0	0.39	0.41	2.98	3.37	4.08	4.62
41	1	0	0	0.37	0.37	3.54	3.54	5.75	5.75
42	0	0	0	0.86	0.87	3.10	3.11	4.99	5.08
43	0	0	0	0.62	0.62	3.03	3.02	4.70	4.71
44	0	0	0	0.35	0.34	2.76	2.76	4.25	4.16
45	0	0	0	0.34	0.34	2.09	2.09	3.90	3.90
46	0	0	0	1.52	1.52	3.37	3.37	5.74	5.75
47	0	0	0	0.51	0.53	3.44	3.53	6.69	6.75
48	0	0	0	0.39	0.39	3.09	3.09	4.89	4.89
49	1	0	0	0.94	0.94	2.85	2.94	4.68	4.68
50	0	0	0	0.39	0.39	3.10	3.10	4.91	4.91
51	1	0	0	1.04	1.05	2.88	2.95	4.80	4.97
52	0	0	0	0.33	0.36	1.85	2.01	3.38	3.69
53	0	0	0	0.95	0.95	3.34	3.34	5.09	5.10
54	0	0	0	0.66	0.67	2.33	2.56	3.99	4.33
55	1	0	0	0.29	0.29	2.80	3.09	5.12	5.41
56	0	0	0	0.58	0.60	2.60	2.82	4.20	4.55
57	0	0	0	0.44	0.48	3.01	3.38	4.84	5.46
58	1	0	0	0.62	0.62	3.03	3.03	4.71	4.72

1									
2									
3	0	0	0	0.60	0.61	2.62	2.83	4.36	4.70
4	0	0	0	0.52	0.52	3.63	3.63	5.75	5.76
5	0	0	0	0.46	0.46	3.76	3.77	5.73	5.74
6	0	0	0	0.40	0.40	3.94	4.32	6.56	7.04
7	1	0	0	0.55	0.55	2.56	2.58	3.94	4.00
8	1	0	0	0.40	0.40	3.75	4.07	5.82	6.24
9	0	0	0	0.43	0.44	3.79	4.20	6.80	7.06
10	1	0	0	0.51	0.53	3.05	3.27	5.12	5.42
11	0	0	0	0.46	0.46	3.71	3.74	5.62	5.69
12	1	0	0	0.41	0.45	3.01	3.42	4.77	5.45
13	0	0	0	0.49	0.50	3.11	3.39	5.29	5.79
14	0	0	0	0.61	0.62	2.96	2.95	4.53	4.59
15	1	0	0	0.66	0.67	2.34	2.55	4.02	4.31
16	0	0	0	0.62	0.62	3.05	3.05	4.75	4.75
17	1	0	0	0.93	0.94	2.90	3.12	4.48	4.80
18	1	0	0	0.47	0.50	3.09	3.35	5.00	5.35
19	1	0	0	0.41	0.45	3.33	3.65	4.61	5.03
20	0	0	0	0.54	0.55	2.22	2.44	3.62	3.87
21	0	0	0	0.26	0.27	2.72	3.02	4.65	4.93
22	1	0	0	0.38	0.38	3.84	3.84	7.74	7.74
23	1	0	0	0.54	0.54	2.28	2.44	4.18	4.71
24	0	0	0	0.44	0.45	3.11	3.44	5.00	5.37
25	1	0	0	0.68	0.69	4.45	4.49	7.80	7.87
26	1	0	0	0.42	0.44	3.43	3.54	5.36	5.51
27	1	0	1	0.35	0.37	2.93	3.31	4.71	5.35
28	1	0	0	0.42	0.41	3.39	3.31	5.80	5.75
29	0	0	0	0.64	0.66	3.62	3.94	6.93	7.20
30	0	0	0	0.65	0.66	4.50	4.56	8.18	8.30
31	0	0	0	0.49	0.50	3.12	3.38	5.30	5.77
32	0	0	0	0.63	0.64	3.81	4.17	7.40	7.82
33	1	0	0	0.32	0.32	2.38	2.59	4.78	5.16
34	0	0	0	0.27	0.27	3.25	3.29	5.07	5.20
35	0	0	0	0.38	0.39	3.40	3.70	7.07	7.35
36	1	0	0	0.38	0.38	1.38	1.57	2.88	3.01
37	0	0	0	0.87	0.87	3.14	3.13	5.08	5.12
38	0	0	0	0.55	0.55	2.55	2.55	5.14	5.17
39	0	0	0	0.85	0.86	2.76	2.91	4.71	4.81
40	1	0	0	0.54	0.54	4.20	4.23	7.76	7.82
41	1	0	1	0.63	0.63	2.49	2.58	5.28	5.45
42	1	0	0	0.47	0.50	3.09	3.36	4.95	5.34
43	1	0	0	0.63	0.63	2.38	2.53	4.93	5.27
44	1	0	0	0.42	0.42	2.09	2.27	3.48	3.78
45	1	0	0	0.62	0.62	3.06	3.05	5.08	5.09
46	1	0	0	0.34	0.35	1.73	1.91	3.27	3.55
47	1	0	0	0.36	0.38	3.26	3.40	5.37	5.59
48	0	0	0	0.41	0.43	2.05	2.27	3.59	3.94
49	0	0	0	0.92	0.94	2.90	3.13	4.47	4.80
50	0	0	0	0.63	0.64	3.80	4.16	7.40	7.81
51	1	0	1	1.44	1.48	2.84	3.10	5.42	5.57
52	1	0	0	0.86	0.86	3.25	3.25	5.00	5.00
53	1	0	0	0.45	0.45	3.12	3.42	5.06	5.42
54	1	0	0	0.52	0.53	3.81	4.01	7.10	7.44
55	0	0	0	0.36	0.37	3.34	3.47	5.38	5.56
56	1	0	0	0.86	0.86	3.24	3.24	4.97	4.98
57	0	0	0	0.60	0.61	2.46	2.75	4.06	4.40
58	1	0	0	0.79	0.79	2.91	2.90	4.53	4.55

1									
2									
3	1	0	0	0.51	0.53	2.29	2.56	3.70	4.10
4	0	0	0	0.61	0.61	2.67	2.67	4.41	4.41
5	1	0	0	0.39	0.39	4.39	4.40	6.71	6.72
6	1	0	0	0.49	0.50	3.78	4.13	7.03	7.28
7	1	0	0	0.46	0.46	3.87	3.87	7.43	7.33
8	0	0	0	0.33	0.33	1.84	1.96	3.37	3.61
9	1	0	0	0.40	0.40	4.39	4.40	6.67	6.69
10	0	0	0	0.62	0.62	3.04	3.03	5.05	5.05
11	0	0	0	0.56	0.55	2.41	2.43	4.24	4.60
12	0	0	0	0.87	0.89	2.93	3.13	4.74	5.09
13	1	0	0	0.35	0.34	2.11	1.94	3.30	3.10
14	1	0	0	0.40	0.39	3.54	3.64	7.56	7.32
15	1	0	0	0.39	0.39	3.57	3.58	5.83	5.84
16	1	0	0	0.55	0.57	2.35	2.57	3.65	4.01
17	0	0	0	0.51	0.49	3.11	3.10	5.24	5.08
18	1	0	0	0.44	0.45	3.92	4.18	6.68	7.09
19	0	0	0	0.42	0.43	2.99	3.28	4.96	5.31
20	1	0	0	0.32	0.32	3.23	3.45	5.84	6.25
21	0	0	0	0.94	0.95	3.15	3.25	4.79	4.94
22	0	0	0	0.44	0.44	3.72	3.75	5.93	5.97
23	1	0	0	0.62	0.62	3.00	2.98	4.62	4.64
24	0	0	0	0.54	0.54	2.75	2.76	4.39	4.40
25	1	0	0	0.39	0.40	3.21	3.52	6.64	6.86
26	0	0	0	0.45	0.45	3.83	4.10	7.04	7.25
27	0	0	0	1.00	1.03	2.54	2.79	4.61	4.86
28	1	0	0	0.94	0.95	3.20	3.25	4.85	4.94
29	1	0	0	0.65	0.66	4.52	4.54	8.22	8.27
30	1	0	0	0.49	0.53	3.33	3.55	5.29	5.58
31	0	0	0	0.31	0.31	3.88	3.88	6.64	6.65
32	0	0	0	0.55	0.55	3.62	3.64	5.89	5.92
33	1	0	0	0.75	0.77	2.46	2.62	4.13	4.21
34	1	0	0	0.76	0.78	2.38	2.66	3.97	4.30
35	1	0	0	0.62	0.62	3.06	3.06	5.09	5.09
36	0	0	0	0.85	0.86	2.78	2.83	4.77	4.73
37	1	0	0	0.84	0.85	2.76	2.89	4.50	4.56
38	0	0	0	0.26	0.26	2.55	2.58	4.98	5.02
39	0	0	0	0.41	0.42	3.49	3.73	5.37	5.91
40	0	0	0	0.76	0.78	2.37	2.67	3.96	4.30
41	0	0	0	0.39	0.39	3.61	3.62	5.59	5.60
42	1	0	0	0.42	0.45	3.90	4.50	6.54	7.33
43	1	0	0	0.49	0.50	2.71	2.96	5.24	5.48
44	0	0	0	0.50	0.50	3.03	3.21	5.52	6.07
45	1	0	0	0.66	0.66	4.49	4.51	7.51	7.57
46	0	0	0	0.35	0.35	3.28	3.54	6.92	7.17
47	0	0	0	0.53	0.54	2.19	2.42	4.14	4.72
48	0	0	0	0.35	0.37	3.51	3.94	5.88	6.60
49	0	0	0	0.63	0.64	3.79	4.14	7.38	7.77
50	1	0	0	0.55	0.55	2.59	2.59	5.23	5.24
51	0	0	0	0.61	0.61	2.68	2.68	4.41	4.41
52	1	0	0	0.34	0.34	1.84	1.84	3.47	3.43
53	0	0	0	0.48	0.50	3.09	3.35	4.98	5.33
54	0	0	0	0.62	0.62	3.05	3.05	5.07	5.07
55	1	0	0	1.52	1.52	3.36	3.36	5.73	5.74
56	0	0	1	0.60	0.59	2.38	2.28	3.92	3.77
57	0	0	0	0.54	0.54	3.64	3.64	5.83	5.83
58	1	0	0	1.47	1.50	3.02	3.24	5.03	5.18

1									
2									
3	1	0	0	0.47	0.48	2.04	2.30	5.01	5.30
4	1	0	0	0.49	0.51	3.16	3.40	5.07	5.44
5	1	0	0	0.94	0.94	2.85	2.93	4.67	4.66
6	0	0	0	0.52	0.52	2.72	2.73	4.48	4.50
7	0	0	0	0.45	0.47	2.85	3.13	4.94	5.25
8	0	0	0	0.51	0.53	3.25	3.45	5.17	5.55
9	1	0	0	0.39	0.39	2.55	2.55	4.37	4.45
10	0	0	0	0.44	0.44	3.83	4.16	7.15	7.45
11	1	0	0	0.51	0.51	3.20	3.20	5.71	5.72
12	1	0	0	0.31	0.31	3.85	3.87	6.57	6.64
13	1	0	0	0.41	0.42	2.98	3.28	4.84	5.22
14	1	0	0	0.49	0.51	3.08	3.41	5.36	5.87
15	0	0	0	0.41	0.41	2.66	2.93	4.65	5.02
16	1	0	0	0.46	0.47	2.87	3.12	4.99	5.23
17	1	0	0	0.39	0.40	3.14	3.45	5.53	6.06
18	0	0	0	0.66	0.66	4.49	4.51	7.51	7.57
19	1	0	0	0.60	0.61	2.59	2.85	4.29	4.72
20	0	0	0	0.54	0.56	3.40	3.45	5.58	5.65
21	1	0	0	0.46	0.46	3.15	3.41	5.07	5.31
22	1	0	0	0.54	0.54	2.78	2.78	4.44	4.44
23	1	0	0	0.50	0.53	2.76	3.05	5.22	5.59
24	1	0	0	1.52	1.52	3.36	3.36	5.73	5.74
25	0	0	0	0.51	0.54	2.40	2.65	3.92	4.35
26	0	0	0	0.36	0.37	3.50	3.53	5.62	5.68
27	1	0	0	0.52	0.49	3.19	3.15	5.40	5.18
28	1	0	0	0.39	0.39	3.60	3.61	5.57	5.59
29	1	0	0	1.52	1.52	3.37	3.37	5.74	5.74
30	0	0	0	0.38	0.37	3.00	3.00	5.14	5.08
31	0	0	0	0.34	0.34	2.07	2.07	3.84	3.87
32	1	0	0	0.62	0.63	2.88	2.97	4.71	4.90
33	1	0	0	0.44	0.44	4.62	4.63	7.68	7.70
34	1	0	0	0.55	0.55	2.32	2.38	3.83	3.81
35	1	0	0	0.64	0.64	2.95	2.94	4.59	4.62
36	1	0	0	0.29	0.29	2.80	3.12	5.14	5.48
37	1	0	0	0.53	0.53	2.78	2.78	4.59	4.59
38	0	0	0	0.60	0.61	2.62	2.84	4.34	4.71
39	1	0	0	0.34	0.34	1.86	1.98	3.17	3.19
40	0	0	0	1.00	1.00	3.02	3.02	5.12	5.12
41	1	0	0	0.43	0.43	3.87	4.24	6.65	7.00
42	0	0	0	0.54	0.55	2.23	2.44	3.64	3.87
43	1	0	0	0.61	0.62	3.75	3.78	6.66	6.59
44	1	0	0	0.38	0.38	1.30	1.33	2.78	2.72
45	1	0	0	0.39	0.40	1.93	2.10	3.80	3.99
46	0	0	0	0.62	0.62	3.02	3.01	4.99	5.01
47	1	0	0	0.38	0.39	3.25	3.52	6.59	6.80
48	0	0	0	0.33	0.35	1.73	1.91	3.27	3.55
49	1	0	0	0.40	0.39	3.69	4.04	5.95	6.33
50	0	0	0	0.53	0.54	4.20	4.22	7.78	7.81
51	1	0	0	0.34	0.33	3.31	3.30	6.74	6.26
52	1	0	0	0.53	0.53	3.02	3.17	5.24	5.39
53	1	0	1	0.94	0.96	3.08	3.25	4.72	4.96
54	1	0	0	0.41	0.43	2.05	2.27	3.58	3.95
55	1	0	0	0.45	0.45	3.80	3.81	6.86	6.87
56	0	0	0	0.45	0.46	2.17	2.40	3.54	3.91
57	1	0	0	0.44	0.44	3.83	4.16	7.15	7.45
58	0	0	0	0.45	0.44	3.94	3.80	7.00	6.84
59	1	0	0	0.44	0.44	3.83	4.16	7.15	7.45
60	0	0	0	0.45	0.44	3.94	3.80	7.00	6.84

1									
2									
3	0	0	0	0.43	0.43	2.21	2.22	3.43	3.48
4	0	0	0	0.46	0.48	4.16	4.45	7.55	8.03
5	0	0	0	0.36	0.37	3.98	3.99	6.51	6.41
6	0	0	0	0.45	0.46	4.34	4.46	7.43	7.64
7	1	0	0	0.43	0.43	3.73	3.74	5.15	5.16
8	0	0	0	0.60	0.61	2.61	2.76	4.48	4.62
9	0	0	0	0.44	0.47	3.27	3.80	6.25	7.00
10	1	0	1	0.66	0.67	2.33	2.56	4.00	4.33
11	0	0	0	0.51	0.53	3.04	3.28	5.11	5.42
12	0	0	0	0.43	0.43	2.03	2.00	3.30	3.22
13	1	0	0	0.32	0.32	3.67	3.68	6.67	6.69
14	1	0	0	0.45	0.45	3.53	3.42	6.67	6.46
15	0	0	0	0.98	1.02	2.70	2.67	4.81	4.68
16	0	0	0	0.49	0.51	3.26	3.32	5.49	5.58
17	0	0	0	0.50	0.50	4.34	4.34	7.42	7.42
18	1	0	0	0.50	0.50	3.19	3.27	5.29	5.31
19	0	0	0	0.62	0.62	3.06	3.05	5.08	5.08
20	1	0	1	0.52	0.53	3.58	3.61	5.63	5.68
21	1	0	0	0.47	0.50	3.05	3.37	4.84	5.35
22	1	0	0	0.54	0.54	2.78	2.78	4.44	4.44
23	1	0	0	0.43	0.43	3.81	4.23	6.76	7.07
24	0	0	0	0.63	0.63	2.52	2.62	5.37	5.56
25	1	0	0	0.53	0.53	3.12	3.21	5.26	5.35
26	0	0	0	0.45	0.47	3.58	3.68	5.41	5.59
27	1	0	0	0.52	0.52	3.23	3.17	5.52	5.53
28	0	0	0	0.86	0.86	3.25	3.25	5.00	5.00
29	1	0	0	0.45	0.46	3.18	3.44	5.23	5.80
30	1	0	0	0.36	0.37	3.33	3.45	5.43	5.60
31	1	0	0	0.55	0.55	2.26	2.43	3.71	3.84
32	1	0	0	0.44	0.45	3.11	3.44	4.97	5.36
33	0	0	0	0.53	0.53	3.63	3.63	5.73	5.73
34	0	0	0	0.45	0.45	3.72	3.73	5.79	5.79
35	0	0	0	0.68	0.68	2.67	2.71	4.40	4.50
36	1	0	0	0.60	0.61	2.46	2.75	4.06	4.40
37	1	0	0	0.41	0.41	1.83	2.04	2.91	3.16
38	1	0	0	0.54	0.55	2.23	2.44	3.63	3.87
39	1	0	0	0.40	0.39	2.93	3.20	5.06	5.37
40	0	0	0	0.50	0.51	3.20	3.36	5.17	5.40
41	1	0	1	0.29	0.29	3.45	3.45	5.85	5.86
42	1	0	0	0.40	0.41	2.45	2.50	3.53	3.61
43	1	0	0	0.49	0.51	3.16	3.38	5.09	5.43
44	0	0	0	0.45	0.45	3.77	4.10	6.96	7.23
45	1	0	0	0.50	0.50	3.78	4.12	7.03	7.26
46	1	0	1	0.46	0.46	3.75	3.76	5.71	5.73
47	0	0	0	0.63	0.64	3.80	4.15	7.39	7.79
48	1	0	0	0.41	0.43	2.98	3.30	4.89	5.33
49	0	0	0	0.79	0.79	2.96	2.96	4.64	4.64
50	0	0	0	0.54	0.54	2.29	2.44	4.18	4.70
51	0	0	0	1.47	1.51	2.82	3.13	5.29	5.60
52	1	0	0	0.38	0.38	3.63	3.92	6.05	6.35
53	1	0	0	0.40	0.39	3.69	4.04	5.95	6.33
54	1	0	0	0.55	0.55	2.85	2.85	5.57	5.57
55	1	0	0	0.44	0.44	4.08	4.03	6.45	6.53
56	0	0	0	0.45	0.46	3.61	3.62	5.74	5.76
57	0	0	0	0.60	0.60	2.63	2.64	4.33	4.35
58	1	0	0	0.55	0.55	3.51	3.51	5.74	5.74

1									
2									
3	1	0	0	1.05	1.05	3.05	3.05	5.12	5.12
4	0	0	0	0.53	0.53	3.62	3.63	5.71	5.72
5	1	0	0	1.48	1.51	2.83	3.13	5.29	5.61
6	0	0	0	0.58	0.60	2.60	2.82	4.20	4.55
7	1	0	0	0.60	0.61	2.62	2.84	4.34	4.71
8	0	0	0	0.63	0.64	3.80	4.16	7.40	7.81
9	0	0	0	0.60	0.61	2.62	2.84	4.34	4.71
10	1	0	0	0.40	0.40	2.53	2.83	4.13	4.56
11	1	0	0	0.35	0.34	3.46	3.34	6.67	6.51
12	1	0	0	0.41	0.40	2.55	2.88	4.01	4.49
13	0	0	0	0.41	0.40	2.55	2.89	4.01	4.50
14	0	0	0	0.42	0.42	3.29	3.31	5.14	5.17
15	1	0	0	0.47	0.49	2.86	3.13	5.15	5.42
16	0	0	0	0.59	0.60	3.72	4.09	7.51	7.90
17	0	0	0	0.52	0.52	3.89	4.19	6.84	7.01
18	0	0	0	0.47	0.46	3.29	3.35	5.30	5.25
19	1	0	0	0.37	0.38	3.30	3.55	7.29	7.47
20	1	0	0	0.67	0.68	3.71	4.10	6.83	7.39
21	0	0	0	0.39	0.41	2.96	3.36	4.08	4.62
22	0	0	0	0.60	0.61	2.49	2.75	4.12	4.38
23	0	0	0	0.55	0.55	3.63	3.65	5.90	5.92
24	0	0	0	0.35	0.35	1.52	1.51	3.27	3.23
25	0	0	0	0.51	0.49	3.19	3.13	5.35	5.10
26	1	0	0	0.32	0.31	3.36	3.52	5.83	6.04
27	0	0	0	0.54	0.54	4.20	4.23	7.76	7.82
28	0	0	0	0.56	0.56	2.47	2.67	4.07	4.29
29	0	0	0	0.39	0.40	3.74	3.83	6.95	7.10
30	0	0	0	1.44	1.48	2.83	3.10	5.40	5.57
31	1	0	1	0.41	0.41	4.01	4.02	6.36	6.37
32	1	0	0	0.59	0.57	2.81	2.60	4.41	4.10
33	1	0	0	0.52	0.52	2.45	2.40	3.96	3.85
34	0	0	0	0.36	0.37	3.52	3.56	5.89	5.99
35	0	0	0	0.35	0.36	2.85	3.20	4.78	5.26
36	0	0	0	0.49	0.49	2.28	2.45	3.80	4.07
37	0	0	0	0.65	0.66	4.51	4.55	8.19	8.29
38	1	0	0	0.37	0.38	4.11	4.14	7.16	7.23
39	1	0	0	0.41	0.40	3.77	3.88	6.23	6.20
40	0	0	0	0.59	0.59	2.62	2.69	4.34	4.35
41	1	0	1	0.35	0.35	3.38	3.65	6.72	6.96
42	0	0	0	0.34	0.33	3.36	3.29	6.37	6.02
43	0	0	0	0.38	0.39	3.37	3.73	5.98	6.59
44	0	0	0	0.40	0.39	3.69	4.04	5.95	6.33
45	0	0	0	0.56	0.56	2.66	2.66	4.12	4.12
46	0	0	0	0.52	0.53	3.56	3.61	5.70	5.76
47	0	0	0	0.35	0.35	1.26	1.38	3.15	3.30
48	0	0	0	0.94	0.96	2.97	3.24	4.61	4.97
49	0	0	0	0.43	0.44	3.29	3.55	6.46	6.68
50	0	0	0	0.48	0.50	3.11	3.34	5.05	5.34
51	1	0	0	0.46	0.46	3.75	3.76	5.71	5.73
52	1	0	1	0.35	0.36	1.79	1.84	3.37	3.35
53	0	0	0	0.33	0.34	2.05	2.05	3.76	3.82
54	1	0	1	0.33	0.34	3.27	3.56	6.51	7.04
55	0	0	0	0.43	0.43	4.72	4.72	7.70	7.71
56	0	0	0	0.38	0.38	3.11	3.11	5.03	5.04
57	1	0	0	0.95	0.95	3.34	3.34	5.10	5.11
58	1	0	0	0.61	0.61	2.55	2.72	4.28	4.34

1									
2									
3	0	0	0	0.60	0.62	2.26	2.54	3.72	4.17
4	0	0	0	0.57	0.59	4.15	4.35	6.40	6.88
5	0	0	0	0.59	0.60	2.60	2.81	4.22	4.53
6	1	0	0	0.52	0.52	2.73	2.73	4.49	4.51
7	0	0	0	0.51	0.54	3.35	3.57	5.39	5.67
8	1	0	0	0.43	0.44	3.23	3.60	6.29	6.74
9	1	0	0	0.54	0.56	2.35	2.66	3.77	4.26
10	1	0	0	0.37	0.36	3.27	3.19	5.81	5.61
11	1	0	0	0.53	0.53	2.76	2.77	4.57	4.57
12	1	0	0	1.52	1.52	3.27	3.38	5.04	5.27
13	1	0	0	0.36	0.36	4.16	4.16	6.66	6.66
14	0	0	1	0.33	0.35	1.73	1.91	3.26	3.56
15	0	0	0	0.84	0.85	2.79	3.01	4.35	4.65
16	1	0	0	0.66	0.67	2.32	2.56	3.99	4.33
17	0	0	0	0.48	0.50	3.60	3.64	5.71	5.76
18	0	0	0	0.41	0.43	2.97	3.30	4.76	5.29
19	1	0	0	0.61	0.61	2.66	2.66	4.39	4.39
20	1	0	0	1.47	1.50	3.02	3.25	5.01	5.19
21	0	0	0	0.84	0.86	2.77	2.98	4.56	4.89
22	0	0	0	0.36	0.37	4.19	4.24	6.59	6.72
23	1	0	0	0.46	0.45	4.03	3.91	7.21	7.03
24	0	0	0	0.85	0.85	2.83	2.78	4.85	4.68
25	0	0	0	0.40	0.40	2.53	2.83	4.12	4.56
26	1	0	0	0.49	0.49	2.67	2.71	5.27	5.24
27	1	0	0	0.62	0.63	3.72	4.13	6.70	7.08
28	1	0	1	0.53	0.53	3.63	3.64	5.82	5.83
29	1	0	0	0.84	0.86	2.77	2.98	4.56	4.89
30	0	0	0	0.83	0.85	2.79	3.02	4.33	4.66
31	1	0	0	0.40	0.42	2.97	3.29	4.81	5.23
32	1	0	0	0.43	0.43	1.94	2.08	3.24	3.34
33	1	0	0	0.42	0.43	3.01	3.26	5.02	5.29
34	1	0	0	0.51	0.53	2.32	2.54	3.79	4.11
35	0	0	0	0.64	0.68	3.94	4.51	7.38	8.36
36	0	0	0	0.26	0.26	2.59	2.59	5.03	5.04
37	0	0	0	0.60	0.60	2.58	2.60	4.21	4.27
38	0	0	0	0.55	0.55	3.65	3.65	5.93	5.93
39	0	0	0	0.61	0.62	2.95	2.97	4.84	4.91
40	0	0	0	0.44	0.43	3.84	4.12	6.96	7.01
41	1	0	0	0.43	0.43	3.05	3.24	5.10	5.28
42	1	0	0	0.26	0.26	2.60	2.60	5.04	5.04
43	0	0	0	0.46	0.46	3.62	3.62	5.75	5.76
44	0	0	0	0.84	0.85	2.75	2.90	4.49	4.56
45	1	0	0	0.41	0.40	3.70	4.01	5.96	6.30
46	1	0	0	0.61	0.61	2.65	2.65	4.35	4.37
47	1	0	0	1.54	1.54	3.48	3.48	5.38	5.39
48	0	0	0	0.40	0.39	3.69	4.03	5.95	6.32
49	0	0	0	0.37	0.36	3.63	3.78	6.40	6.34
50	0	0	0	0.44	0.45	4.52	4.56	7.70	7.79
51	0	0	0	0.40	0.40	4.11	4.15	7.47	7.55
52	1	0	1	0.46	0.46	3.77	3.77	5.74	5.75
53	0	0	0	0.49	0.51	3.16	3.38	5.09	5.43
54	0	0	0	0.85	0.86	3.17	3.18	4.84	4.88
55	1	0	0	0.43	0.44	3.95	4.22	6.59	7.03
56	1	0	0	0.65	0.66	4.51	4.55	8.19	8.29
57	1	0	0	0.35	0.35	3.79	3.80	7.37	7.38
58	1	0	0	0.37	0.36	3.68	3.67	6.43	6.28



1									
2									
3	1	0	0	0.67	0.65	2.49	2.42	5.07	4.98
4	0	0	0	0.60	0.61	2.65	2.70	4.53	4.52
5	1	0	0	0.85	0.85	2.82	2.85	4.50	4.45
6	0	0	0	0.48	0.50	3.11	3.37	5.00	5.38
7	1	0	0	0.51	0.50	3.34	3.21	5.56	5.43
8	0	0	0	0.51	0.51	4.17	4.49	6.82	7.38
9	0	0	0	0.57	0.57	2.91	2.91	4.65	4.65
10	1	0	0	0.39	0.40	3.51	3.63	5.62	5.85
11	1	0	0	0.64	0.65	4.52	4.58	7.40	7.53
12	0	0	0	0.32	0.32	3.66	3.69	6.56	6.64
13	0	0	0	0.95	0.94	2.93	2.93	4.76	4.66
14	1	0	0	0.56	0.56	2.54	2.66	4.20	4.25
15	1	0	0	0.51	0.50	3.36	3.21	5.56	5.46
16	1	0	0	0.48	0.49	3.60	3.62	5.77	5.80
17	0	0	0	0.40	0.40	4.65	4.70	7.39	7.50
18	1	0	0	0.54	0.55	2.23	2.44	3.62	3.87
19	1	0	0	0.55	0.55	2.58	2.58	5.21	5.22
20	1	0	0	0.41	0.41	4.44	4.45	6.76	6.78
21	1	0	1	0.37	0.36	1.80	1.77	3.27	3.19
22	0	0	0	0.60	0.61	2.62	2.84	4.34	4.71
23	1	0	0	0.41	0.41	4.46	4.48	7.09	7.14
24	0	0	0	0.59	0.60	2.60	2.79	4.25	4.52
25	0	0	0	0.38	0.39	3.38	3.75	6.01	6.64
26	0	0	0	0.58	0.60	2.16	2.44	3.60	4.04
27	1	0	0	0.50	0.50	3.78	4.11	7.04	7.25
28	0	0	0	0.65	0.69	4.33	4.67	7.89	8.55
29	0	0	0	0.69	0.68	2.79	2.79	4.66	4.67
30	1	0	0	0.40	0.39	2.91	3.22	5.03	5.39
31	0	0	0	0.45	0.45	3.12	3.43	5.01	5.36
32	1	0	0	0.42	0.41	2.85	2.68	4.51	4.26
33	1	0	1	0.44	0.44	3.52	3.39	6.68	6.48
34	1	0	0	0.39	0.39	3.54	3.56	5.77	5.82
35	1	0	0	0.36	0.38	1.85	2.01	3.39	3.62
36	1	0	0	0.47	0.46	2.48	2.38	4.12	4.11
37	0	0	0	0.34	0.34	2.08	2.08	3.88	3.89
38	1	0	0	0.55	0.55	3.51	3.52	5.73	5.74
39	1	0	1	0.41	0.43	2.05	2.27	3.59	3.94
40	1	0	1	0.60	0.61	2.62	2.84	4.34	4.71
41	1	0	0	0.40	0.39	3.50	3.46	7.47	7.24
42	0	0	0	0.60	0.60	2.91	2.96	4.65	4.72
43	1	0	0	0.86	0.86	3.26	3.26	5.00	5.00
44	0	0	1	0.62	0.63	3.71	4.12	6.70	7.07
45	1	0	0	0.94	0.96	2.53	2.75	4.69	4.85
46	1	0	0	0.40	0.41	2.09	2.35	3.73	4.21
47	1	0	0	0.43	0.43	1.93	2.09	3.22	3.36
48	0	0	0	0.50	0.50	3.43	3.43	5.76	5.76
49	0	0	0	0.36	0.36	2.08	2.09	3.84	3.85
50	1	0	0	0.53	0.55	2.16	2.42	4.18	4.75
51	1	0	0	0.38	0.40	3.19	3.63	6.40	7.00
52	1	0	0	0.84	0.86	2.77	2.98	4.56	4.89
53	0	0	0	0.47	0.48	2.85	3.13	5.12	5.43
54	1	0	0	0.56	0.56	2.48	2.65	5.04	5.25
55	1	0	0	0.55	0.55	3.58	3.58	6.30	6.30
56	0	0	0	0.45	0.45	3.12	3.43	5.01	5.35
57	0	0	0	1.51	1.52	3.36	3.36	5.72	5.73
58	1	0	0	0.31	0.34	3.23	3.65	5.68	6.53

1										
2										
3	0	0	0	0.68	0.69	4.45	4.49	7.78	7.88	
4	1	0	0	0.43	0.44	3.53	3.58	5.51	5.59	
5	1	0	0	0.31	0.33	3.27	3.65	5.87	6.62	
6	1	0	0	0.61	0.63	2.77	2.95	4.23	4.59	
7	1	0	1	0.43	0.44	3.30	3.54	6.47	6.68	
8	1	0	0	0.40	0.40	3.13	3.13	5.01	5.01	
9										

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

For peer review only

	SO2-1Y	SO2-2Y	NO2-Y1	NO2-2Y	O3-1Y	O3-Y2
1						
2						
3						
4	0.44	0.46	1.72	1.78	2.94	2.93
5	0.35	0.36	2.70	2.83	2.31	2.30
6	0.31	0.31	1.02	1.03	3.10	2.95
7	0.27	0.29	1.40	1.51	2.98	2.97
8	0.66	0.70	2.32	2.34	2.79	2.60
9	0.34	0.37	1.34	1.35	2.91	2.98
10	0.58	0.58	1.95	1.97	2.75	2.72
11	0.47	0.50	1.86	1.95	2.72	2.74
12	0.44	0.44	1.63	1.63	3.18	3.18
13	0.80	0.86	2.39	2.41	2.56	2.60
14	0.39	0.43	2.03	2.09	2.73	2.70
15	0.29	0.31	1.06	1.06	3.17	3.16
16	0.29	0.29	2.24	2.25	2.57	2.56
17	0.80	0.82	2.36	2.44	2.79	2.78
18	0.50	0.50	1.77	1.77	2.99	2.99
19	0.45	0.45	2.09	2.09	2.83	2.83
20	0.41	0.41	1.93	1.93	2.68	2.68
21	0.32	0.32	1.58	1.58	2.90	2.90
22	0.29	0.31	2.48	2.61	2.33	2.39
23	0.34	0.34	2.02	2.02	2.80	2.80
24	0.38	0.39	1.81	1.92	2.64	2.58
25	0.37	0.37	1.51	1.51	2.90	2.90
26	0.31	0.31	1.40	1.42	3.09	3.07
27	0.39	0.39	1.57	1.59	2.85	2.85
28	0.59	0.65	2.20	2.24	2.49	2.63
29	0.21	0.21	0.63	0.63	2.65	2.65
30	0.30	0.30	1.64	1.65	2.77	2.77
31	0.30	0.32	1.88	2.04	2.66	2.65
32	0.32	0.33	1.34	1.35	2.97	2.99
33	0.48	0.49	1.98	1.98	2.82	2.82
34	0.43	0.46	1.70	1.78	2.93	2.93
35	0.29	0.29	1.22	1.25	3.20	3.17
36	0.44	0.44	1.61	1.61	2.95	2.95
37	0.35	0.35	1.57	1.57	2.96	2.96
38	0.40	0.45	2.01	2.15	2.59	2.66
39	0.36	0.39	1.28	1.34	2.92	2.95
40	0.35	0.36	2.72	2.82	2.34	2.29
41	0.44	0.42	2.14	2.08	2.78	2.68
42	0.32	0.35	1.38	1.43	3.12	3.12
43	0.45	0.44	2.08	2.08	2.82	2.82
44	0.42	0.42	1.45	1.54	3.01	2.98
45	0.30	0.32	1.20	1.25	3.01	3.03
46	0.41	0.41	1.47	1.47	3.20	3.20
47	0.38	0.38	1.36	1.37	3.06	3.06
48	0.49	0.49	1.74	1.75	2.97	2.97
49	0.42	0.42	3.49	3.50	2.43	2.42
50	0.31	0.31	2.47	2.47	2.48	2.48
51	0.36	0.36	1.62	1.63	2.98	2.98
52	0.40	0.38	2.04	2.01	2.73	2.68
53	0.48	0.50	2.15	2.22	2.60	2.58
54	0.35	0.39	1.32	1.37	2.97	3.08
55	0.79	0.85	2.38	2.40	2.61	2.61
56	0.29	0.30	1.04	1.02	3.28	3.21
57	0.48	0.48	2.19	2.19	2.70	2.70
58	0.35	0.38	1.52	1.56	3.08	3.17
59						
60						

1						
2						
3	0.23	0.23	1.08	1.08	2.75	2.75
4	0.40	0.40	1.39	1.40	3.06	3.05
5	0.61	0.63	2.04	2.26	2.76	2.78
6	0.31	0.32	1.50	1.62	2.83	2.76
7	0.82	0.82	2.40	2.40	2.84	2.84
8	0.35	0.38	1.41	1.43	2.97	3.06
9	0.28	0.31	1.58	1.68	2.80	2.86
10	0.41	0.42	1.93	1.93	2.68	2.68
11	0.31	0.33	1.47	1.54	2.95	2.96
12	0.30	0.31	1.04	1.07	3.16	3.18
13	0.37	0.40	2.20	2.28	2.53	2.60
14	0.35	0.36	1.58	1.61	2.97	2.95
15	0.30	0.33	1.74	1.81	2.65	2.62
16	0.50	0.54	2.05	2.12	2.61	2.63
17	0.92	0.93	2.43	2.44	2.64	2.64
18	0.32	0.32	1.57	1.58	2.89	2.89
19	0.51	0.57	1.49	1.53	2.97	3.13
20	0.28	0.31	1.79	1.89	2.75	2.79
21	0.61	0.61	2.00	2.01	2.78	2.78
22	0.37	0.37	1.52	1.48	3.02	2.95
23	0.27	0.29	2.20	2.29	2.49	2.45
24	0.34	0.38	3.20	3.35	2.32	2.38
25	0.33	0.35	2.08	2.25	2.40	2.47
26	0.34	0.34	0.88	0.94	3.47	3.48
27	0.31	0.31	2.47	2.47	2.49	2.49
28	0.44	0.44	1.60	1.60	3.32	3.32
29	0.25	0.27	2.07	2.15	2.54	2.55
30	0.28	0.31	1.48	1.52	3.07	3.06
31	0.46	0.44	2.08	2.08	2.66	2.63
32	0.21	0.24	0.94	1.00	3.44	3.38
33	0.34	0.38	1.48	1.52	3.08	3.16
34	0.29	0.31	2.50	2.56	2.42	2.39
35	0.30	0.30	1.29	1.29	3.18	3.18
36	0.37	0.41	1.32	1.37	3.02	3.03
37	0.60	0.60	1.99	1.99	2.77	2.76
38	0.41	0.42	1.53	1.55	3.21	3.21
39	0.30	0.31	1.38	1.47	2.88	2.88
40	0.92	0.92	2.43	2.45	2.63	2.63
41	0.31	0.30	2.40	2.45	2.44	2.40
42	0.40	0.40	1.98	1.99	2.68	2.68
43	0.37	0.40	2.20	2.28	2.54	2.60
44	0.41	0.41	1.92	1.93	2.67	2.67
45	0.55	0.62	2.07	2.13	2.60	2.75
46	0.34	0.34	1.67	1.67	3.02	3.02
47	0.29	0.32	1.43	1.55	2.90	2.89
48	0.37	0.37	2.83	2.83	2.40	2.40
49	0.29	0.29	2.24	2.25	2.57	2.56
50	0.92	0.92	2.43	2.45	2.63	2.63
51	0.32	0.35	3.47	3.61	2.48	2.56
52	0.48	0.54	1.83	1.91	2.87	2.99
53	0.44	0.44	1.47	1.47	3.09	3.09
54	0.23	0.26	1.11	1.20	3.16	3.16
55	0.29	0.33	2.54	2.67	2.42	2.39
56	0.31	0.32	1.63	1.73	2.88	2.87
57	0.56	0.58	1.87	1.93	2.70	2.73
58	0.27	0.30	1.39	1.50	2.95	2.95

1						
2						
3	0.46	0.46	2.18	2.20	2.69	2.67
4	0.39	0.40	1.58	1.65	2.80	2.78
5	0.31	0.30	2.43	2.45	2.46	2.43
6	0.34	0.35	1.73	1.71	2.88	2.75
7	0.30	0.30	1.39	1.45	2.99	2.93
8	0.56	0.57	2.16	2.18	2.64	2.63
9	0.37	0.37	2.83	2.83	2.40	2.40
10	0.35	0.34	1.71	1.69	2.78	2.77
11	0.26	0.28	1.25	1.28	3.24	3.13
12	0.24	0.26	1.12	1.20	3.16	3.16
13	0.33	0.33	1.97	2.01	2.79	2.77
14	0.29	0.33	2.54	2.67	2.42	2.39
15	0.28	0.31	1.64	1.72	2.90	2.92
16	0.34	0.34	1.67	1.67	3.02	3.02
17	0.31	0.33	1.49	1.54	2.95	2.96
18	0.32	0.32	1.93	1.99	2.67	2.60
19	0.37	0.37	1.84	1.84	2.93	2.93
20	0.55	0.55	1.83	1.83	3.03	3.03
21	0.36	0.36	1.61	1.62	2.97	2.98
22	0.33	0.35	2.66	2.83	2.29	2.37
23	0.35	0.39	1.26	1.32	2.98	2.99
24	0.24	0.27	1.19	1.27	3.10	3.10
25	0.34	0.34	1.99	1.99	2.82	2.82
26	0.37	0.37	1.84	1.85	2.93	2.93
27	0.27	0.30	2.21	2.35	2.46	2.43
28	0.29	0.32	1.47	1.50	2.84	2.83
29	0.32	0.32	2.59	2.74	2.29	2.38
30	0.35	0.37	3.24	3.28	2.37	2.35
31	0.33	0.33	1.92	1.98	2.76	2.69
32	0.65	0.74	2.23	2.31	2.66	2.75
33	0.79	0.85	2.38	2.40	2.62	2.61
34	0.42	0.42	1.35	1.37	3.10	3.09
35	0.30	0.33	2.12	2.26	2.45	2.42
36	0.29	0.31	1.77	1.88	2.77	2.78
37	0.31	0.33	1.34	1.40	2.89	2.88
38	0.29	0.31	2.53	2.58	2.47	2.38
39	0.61	0.62	2.00	2.05	3.04	3.05
40	0.39	0.40	1.58	1.64	2.81	2.79
41	0.80	0.86	2.39	2.41	2.57	2.60
42	0.32	0.35	3.47	3.60	2.48	2.56
43	0.34	0.34	2.01	2.02	2.80	2.80
44	0.44	0.44	1.60	1.60	3.32	3.32
45	0.30	0.31	1.38	1.47	2.89	2.88
46	0.57	0.59	1.92	2.13	2.86	2.89
47	0.40	0.40	1.61	1.62	2.83	2.83
48	0.32	0.32	1.55	1.59	2.87	2.85
49	0.69	0.80	1.74	1.96	3.08	3.12
50	0.41	0.41	1.93	1.93	2.68	2.67
51	0.33	0.33	2.73	2.73	2.44	2.44
52	0.36	0.36	1.62	1.63	2.98	2.98
53	0.41	0.41	1.93	1.93	2.68	2.68
54	0.53	0.53	1.77	1.85	2.97	2.95
55	0.79	0.83	2.35	2.45	2.78	2.76
56	0.54	0.60	2.01	2.07	2.63	2.79
57	0.44	0.46	1.72	1.78	2.94	2.93
58	0.44	0.44	2.37	2.37	2.67	2.67

1						
2						
3	0.30	0.31	1.52	1.50	3.05	2.95
4	0.27	0.29	2.21	2.34	2.41	2.45
5	0.20	0.20	0.95	0.97	2.55	2.62
6	0.38	0.38	3.73	3.74	2.64	2.63
7	0.38	0.38	3.71	3.73	2.64	2.61
8	0.55	0.58	1.87	1.94	2.69	2.73
9	0.29	0.30	2.57	2.68	2.40	2.44
10	0.61	0.61	2.01	2.01	2.78	2.78
11	0.33	0.34	1.47	1.52	3.02	2.99
12	0.36	0.36	2.40	2.41	2.40	2.40
13	0.44	0.44	2.36	2.37	2.66	2.66
14	0.36	0.36	2.84	2.84	2.69	2.69
15	0.29	0.31	2.55	2.71	2.31	2.40
16	0.31	0.34	1.34	1.37	2.89	2.96
17	0.35	0.35	0.78	0.80	3.84	3.86
18	0.28	0.30	1.84	1.94	2.64	2.68
19	0.40	0.40	1.88	1.93	2.65	2.63
20	0.30	0.30	1.58	1.60	2.80	2.79
21	0.55	0.58	1.87	1.94	2.69	2.73
22	0.92	0.92	2.43	2.45	2.63	2.63
23	0.31	0.33	0.90	0.92	3.43	3.40
24	0.37	0.40	2.20	2.28	2.54	2.60
25	0.31	0.30	2.41	2.45	2.45	2.41
26	0.45	0.45	2.09	2.09	2.83	2.83
27	0.26	0.28	1.18	1.28	3.10	3.20
28	0.31	0.31	2.47	2.47	2.49	2.49
29	0.62	0.67	2.19	2.24	2.88	2.76
30	0.31	0.33	1.13	1.16	3.02	3.06
31	0.40	0.40	1.61	1.62	2.84	2.84
32	0.33	0.33	2.73	2.73	2.44	2.44
33	0.29	0.29	2.24	2.24	2.57	2.56
34	0.36	0.37	1.38	1.47	3.02	2.94
35	0.29	0.31	2.48	2.60	2.34	2.39
36	0.53	0.62	1.91	1.98	2.67	2.80
37	0.45	0.46	2.12	2.13	2.70	2.65
38	0.28	0.28	1.90	1.91	2.72	2.72
39	0.37	0.35	3.46	3.48	2.54	2.51
40	0.58	0.63	2.15	2.20	2.69	2.70
41	0.28	0.29	1.46	1.62	2.67	2.69
42	0.41	0.42	1.75	1.88	2.67	2.61
43	0.53	0.53	1.77	1.87	2.97	2.94
44	0.31	0.33	2.02	2.17	2.51	2.51
45	0.31	0.32	2.53	2.70	2.27	2.37
46	0.34	0.34	1.79	1.79	2.87	2.87
47	0.33	0.35	2.20	2.38	2.34	2.40
48	0.34	0.37	1.43	1.44	3.07	3.13
49	0.37	0.37	2.84	2.84	2.37	2.37
50	0.40	0.41	1.89	1.93	2.66	2.64
51	0.29	0.32	1.44	1.54	2.92	2.90
52	0.34	0.34	0.95	0.96	3.38	3.39
53	0.26	0.29	1.18	1.26	3.13	3.14
54	0.39	0.41	1.67	1.87	2.66	2.64
55	0.24	0.27	1.74	1.86	2.68	2.72
56	0.37	0.37	1.50	1.50	3.12	3.05
57	0.38	0.38	2.13	2.14	2.63	2.61
58	0.20	0.20	0.64	0.64	2.86	2.87

1						
2						
3	0.36	0.36	2.81	2.82	2.40	2.39
4	0.34	0.34	1.22	1.23	3.09	3.09
5	0.29	0.33	2.54	2.69	2.39	2.38
6	0.27	0.27	1.60	1.60	3.12	3.12
7	0.29	0.29	1.71	1.64	2.98	2.89
8	0.29	0.33	2.54	2.67	2.41	2.38
9	0.65	0.74	2.23	2.31	2.66	2.75
10	0.34	0.37	3.24	3.31	2.34	2.37
11	0.30	0.33	1.66	1.71	3.06	2.96
12	0.40	0.40	1.61	1.62	2.84	2.84
13	0.42	0.42	1.54	1.54	3.22	3.22
14	0.39	0.40	1.55	1.66	2.77	2.73
15	0.31	0.31	1.38	1.38	3.05	3.05
16	0.34	0.34	1.80	1.80	2.93	2.93
17	0.68	0.74	2.35	2.39	2.54	2.59
18	0.42	0.42	1.60	1.63	3.25	3.24
19	0.46	0.47	1.69	1.75	2.82	2.97
20	0.29	0.31	2.48	2.61	2.33	2.39
21	0.30	0.31	1.38	1.48	2.87	2.88
22	0.62	0.62	1.89	1.89	2.93	2.93
23	0.32	0.32	1.58	1.58	2.90	2.90
24	0.37	0.37	1.33	1.36	3.18	3.17
25	0.36	0.39	1.48	1.62	2.68	2.72
26	0.34	0.37	1.43	1.52	2.77	2.81
27	0.28	0.28	1.12	1.17	3.22	3.21
28	0.30	0.33	2.01	2.12	2.57	2.52
29	0.31	0.31	2.46	2.47	2.48	2.48
30	0.30	0.31	1.63	1.65	2.95	2.85
31	0.42	0.42	2.31	2.35	2.60	2.58
32	0.29	0.31	2.48	2.60	2.34	2.39
33	0.40	0.40	1.61	1.62	2.84	2.84
34	0.34	0.36	1.19	1.24	3.08	3.05
35	0.20	0.22	1.01	1.05	2.58	2.66
36	0.26	0.28	1.25	1.33	3.04	3.04
37	0.30	0.31	1.19	1.19	3.08	3.05
38	0.32	0.33	1.34	1.35	2.97	2.99
39	0.20	0.21	1.02	1.05	2.54	2.55
40	0.21	0.21	0.83	0.87	2.83	2.87
41	0.40	0.44	1.84	1.91	2.84	2.83
42	0.55	0.58	1.87	1.94	2.69	2.73
43	0.28	0.30	1.70	1.72	2.91	2.90
44	0.34	0.34	1.31	1.31	3.25	3.25
45	0.34	0.38	1.47	1.50	3.05	3.14
46	0.31	0.33	0.84	0.89	3.46	3.49
47	0.42	0.42	2.33	2.36	2.62	2.60
48	0.33	0.33	2.67	2.71	2.40	2.37
49	0.28	0.30	1.85	1.89	2.80	2.79
50	0.33	0.34	1.59	1.60	2.83	2.83
51	0.35	0.37	1.80	1.99	2.53	2.47
52	0.40	0.40	1.61	1.62	2.84	2.84
53	0.37	0.37	2.82	2.83	2.40	2.40
54	0.31	0.34	2.60	2.77	2.28	2.34
55	0.40	0.40	1.39	1.40	3.06	3.05
56	0.41	0.41	1.49	1.50	3.21	3.20
57	0.49	0.49	1.99	1.99	2.83	2.83
58	0.37	0.40	1.51	1.55	3.01	3.17

1						
2						
3	0.30	0.33	2.62	2.70	2.38	2.38
4	0.37	0.37	1.45	1.44	2.91	2.88
5	0.34	0.34	1.31	1.31	3.25	3.25
6	0.27	0.27	1.37	1.43	2.88	2.80
7	0.33	0.33	1.56	1.56	3.01	3.01
8	0.39	0.40	1.37	1.42	3.06	3.02
9	0.29	0.31	1.75	1.87	2.76	2.78
10	0.30	0.32	1.65	1.69	3.12	2.96
11	0.37	0.40	1.51	1.53	3.06	3.15
12	0.37	0.41	1.57	1.66	3.06	3.06
13	0.16	0.18	1.02	1.02	2.42	2.49
14	0.35	0.38	1.50	1.51	3.13	3.16
15	0.42	0.42	1.57	1.58	3.24	3.23
16	0.15	0.18	0.29	0.32	3.71	3.56
17	0.29	0.31	1.83	1.93	2.76	2.78
18	0.33	0.32	2.65	2.71	2.38	2.35
19	0.35	0.37	1.48	1.49	3.24	3.18
20	0.35	0.35	3.44	3.52	2.48	2.51
21	0.28	0.29	2.22	2.37	2.32	2.41
22	0.31	0.31	2.44	2.46	2.47	2.45
23	0.38	0.38	1.13	1.13	3.19	3.19
24	0.30	0.33	2.11	2.22	2.49	2.44
25	0.34	0.34	0.94	0.95	3.45	3.46
26	0.38	0.38	1.43	1.44	3.01	3.01
27	0.29	0.30	2.56	2.69	2.37	2.43
28	0.30	0.33	2.12	2.23	2.47	2.43
29	0.36	0.36	2.83	2.83	2.69	2.68
30	0.40	0.45	1.63	1.67	2.88	2.96
31	0.40	0.40	1.46	1.48	2.93	2.92
32	0.33	0.33	1.59	1.59	2.85	2.85
33	0.32	0.35	1.06	1.07	3.01	3.07
34	0.30	0.33	2.60	2.71	2.36	2.38
35	0.29	0.33	2.61	2.71	2.37	2.38
36	0.34	0.38	3.20	3.35	2.32	2.38
37	0.19	0.19	1.19	1.18	2.91	2.87
38	0.32	0.32	1.58	1.58	2.90	2.89
39	0.33	0.33	1.87	1.89	2.85	2.83
40	0.40	0.44	1.83	1.91	2.83	2.83
41	0.47	0.47	2.22	2.22	2.72	2.72
42	0.29	0.33	2.54	2.69	2.39	2.38
43	0.28	0.31	1.80	1.89	2.78	2.80
44	0.34	0.35	2.69	2.83	2.30	2.34
45	0.27	0.30	1.17	1.25	3.14	3.16
46	0.44	0.44	2.14	2.20	2.64	2.62
47	0.28	0.28	1.94	1.97	2.73	2.70
48	0.34	0.34	2.07	2.08	2.77	2.76
49	0.37	0.39	1.37	1.49	2.96	3.04
50	0.29	0.33	2.54	2.69	2.39	2.38
51	0.29	0.31	1.80	1.92	2.66	2.70
52	0.47	0.47	2.21	2.21	2.72	2.72
53	0.49	0.49	1.98	1.99	2.82	2.83
54	0.33	0.33	2.73	2.73	2.44	2.44
55	0.31	0.32	2.10	2.14	2.49	2.41
56	0.79	0.80	2.42	2.48	2.62	2.62
57	0.40	0.45	1.64	1.67	2.88	2.95
58	0.29	0.31	2.49	2.59	2.36	2.39



1						
2						
3	0.36	0.36	2.41	2.41	2.40	2.40
4	0.36	0.36	0.80	0.80	3.89	3.89
5	0.27	0.30	2.21	2.34	2.48	2.44
6	0.56	0.58	1.88	1.93	2.70	2.73
7	0.30	0.30	2.51	2.50	2.43	2.34
8	0.34	0.34	2.07	2.07	2.77	2.77
9	0.31	0.33	2.10	2.18	2.47	2.46
10	0.27	0.27	1.60	1.60	3.12	3.12
11	0.28	0.31	1.83	1.90	2.79	2.79
12	0.29	0.33	2.60	2.71	2.36	2.38
13	0.66	0.69	2.32	2.34	2.77	2.59
14	0.30	0.30	1.27	1.27	3.21	3.21
15	0.35	0.36	1.52	1.54	2.81	2.81
16	0.62	0.62	2.01	2.04	3.05	3.05
17	0.79	0.80	2.42	2.46	2.63	2.64
18	0.29	0.32	1.52	1.62	2.86	2.90
19	0.33	0.33	1.77	1.79	2.91	2.90
20	0.36	0.36	2.30	2.30	2.47	2.47
21	0.34	0.34	1.56	1.57	2.96	2.95
22	0.31	0.34	2.09	2.20	2.44	2.46
23	0.66	0.70	2.32	2.34	2.79	2.60
24	0.26	0.29	1.08	1.14	2.99	3.12
25	0.34	0.37	1.43	1.52	2.78	2.81
26	0.18	0.20	0.77	0.81	2.81	2.88
27	0.37	0.37	2.84	2.84	2.37	2.37
28	0.16	0.19	1.01	1.02	2.41	2.50
29	0.35	0.38	2.64	2.76	2.79	2.82
30	0.42	0.42	1.58	1.59	3.24	3.24
31	0.36	0.36	2.30	2.30	2.47	2.47
32	0.24	0.27	1.75	1.86	2.68	2.71
33	0.21	0.21	1.02	1.03	2.58	2.58
34	0.36	0.36	2.84	2.84	2.69	2.69
35	0.33	0.35	3.47	3.59	2.48	2.56
36	0.21	0.21	0.85	0.85	2.95	2.95
37	0.34	0.34	1.79	1.79	2.87	2.87
38	0.30	0.28	1.22	1.23	3.14	3.06
39	0.33	0.34	1.94	1.98	2.77	2.72
40	0.58	0.58	1.96	1.98	2.75	2.73
41	0.39	0.39	3.75	3.75	2.63	2.63
42	0.34	0.34	1.98	1.99	2.82	2.81
43	0.47	0.51	1.25	1.32	3.18	3.18
44	0.29	0.31	1.59	1.69	2.86	2.86
45	0.32	0.35	3.47	3.61	2.48	2.56
46	0.28	0.31	1.64	1.72	2.90	2.92
47	0.32	0.32	2.10	2.12	2.48	2.41
48	0.33	0.34	1.42	1.51	2.85	2.80
49	0.28	0.31	1.87	1.92	2.78	2.78
50	0.41	0.44	2.03	2.12	2.69	2.71
51	0.29	0.30	2.57	2.68	2.40	2.44
52	0.41	0.41	1.49	1.49	3.21	3.21
53	0.25	0.26	1.73	1.82	2.62	2.67
54	0.62	0.62	1.46	1.46	3.16	3.17
55	0.43	0.44	1.43	1.45	3.20	3.21
56	0.30	0.31	1.38	1.48	2.88	2.88
57	0.35	0.35	2.23	2.30	2.48	2.44
58	0.70	0.70	2.27	2.34	2.77	2.76

1						
2						
3	0.23	0.23	1.03	1.03	2.80	2.81
4	0.30	0.31	2.62	2.64	2.42	2.35
5	0.32	0.35	1.44	1.52	2.74	2.76
6	0.34	0.35	2.72	2.81	2.34	2.32
7	0.35	0.38	1.40	1.39	3.01	3.07
8	0.62	0.62	1.45	1.45	3.16	3.16
9	0.59	0.58	1.90	1.93	2.72	2.73
10	0.28	0.31	1.66	1.72	2.91	2.91
11	0.30	0.31	1.27	1.32	2.90	2.93
12	0.29	0.31	1.93	1.96	2.81	2.77
13	0.41	0.41	1.43	1.43	3.16	3.16
14	0.28	0.29	1.91	1.86	2.84	2.74
15	0.29	0.31	2.53	2.59	2.47	2.38
16	0.59	0.59	1.85	1.87	2.93	2.93
17	0.31	0.31	2.47	2.47	2.49	2.49
18	0.29	0.31	2.56	2.72	2.30	2.39
19	0.46	0.46	2.18	2.20	2.69	2.68
20	0.42	0.44	2.05	2.12	2.72	2.71
21	0.34	0.35	2.27	2.42	2.35	2.38
22	0.31	0.32	1.13	1.14	3.04	3.05
23	0.42	0.42	1.54	1.54	3.22	3.22
24	0.40	0.40	1.50	1.51	2.92	2.91
25	0.35	0.35	1.20	1.21	3.11	3.11
26	0.63	0.58	1.92	1.90	2.76	2.68
27	0.92	0.92	2.42	2.47	2.62	2.62
28	0.30	0.34	1.71	1.83	2.58	2.60
29	0.29	0.30	2.28	2.44	2.34	2.43
30	0.36	0.36	2.41	2.41	2.40	2.40
31	0.29	0.33	2.54	2.69	2.38	2.37
32	0.25	0.27	2.07	2.16	2.52	2.55
33	0.36	0.40	1.52	1.57	3.02	3.10
34	0.44	0.44	2.36	2.36	2.66	2.66
35	0.49	0.49	1.87	1.86	2.94	2.94
36	0.34	0.35	2.25	2.42	2.35	2.40
37	0.33	0.33	1.39	1.40	2.97	2.97
38	0.25	0.27	1.16	1.24	2.81	2.86
39	0.30	0.30	1.20	1.22	3.08	3.00
40	0.31	0.33	1.22	1.28	2.95	3.00
41	0.51	0.57	1.49	1.53	2.97	3.13
42	0.23	0.23	1.08	1.08	2.76	2.76
43	0.32	0.36	1.72	1.84	2.65	2.63
44	0.46	0.46	1.73	1.77	2.95	2.92
45	0.31	0.34	2.09	2.19	2.44	2.46
46	0.26	0.28	2.12	2.25	2.45	2.54
47	0.15	0.18	0.64	0.64	2.77	2.82
48	0.31	0.31	1.45	1.46	3.05	3.03
49	0.32	0.32	1.96	2.07	2.68	2.57
50	0.37	0.40	1.46	1.51	2.92	2.87
51	0.32	0.32	1.57	1.58	2.89	2.88
52	0.37	0.37	1.48	1.53	2.88	2.86
53	0.62	0.62	1.49	1.49	3.35	3.35
54	0.33	0.34	1.30	1.32	3.07	3.06
55	0.52	0.52	2.25	2.25	2.66	2.66
56	0.80	0.86	2.39	2.41	2.56	2.60
57	0.30	0.32	0.97	1.00	3.28	3.35
58	0.42	0.42	1.50	1.50	3.20	3.20

1						
2						
3	0.33	0.33	2.69	2.71	2.41	2.39
4	0.32	0.35	3.47	3.61	2.48	2.56
5	0.57	0.58	2.19	2.19	2.65	2.65
6	0.33	0.36	1.42	1.47	2.87	2.81
7	0.23	0.22	1.19	1.27	3.01	3.04
8	0.41	0.44	2.04	2.12	2.71	2.71
9	0.40	0.41	1.46	1.51	3.19	3.16
10	0.44	0.44	1.60	1.61	2.94	2.94
11	0.31	0.31	2.45	2.46	2.48	2.47
12	0.30	0.31	1.26	1.30	3.05	2.99
13	0.42	0.42	1.42	1.43	3.15	3.15
14	0.27	0.29	1.40	1.51	2.96	2.97
15	0.40	0.44	1.64	1.66	2.91	2.96
16	0.37	0.37	2.83	2.83	2.40	2.40
17	0.33	0.33	2.73	2.73	2.44	2.44
18	0.37	0.40	2.20	2.28	2.55	2.60
19	0.38	0.41	1.30	1.33	3.16	3.16
20	0.36	0.36	1.55	1.55	2.88	2.88
21	0.55	0.58	1.87	1.94	2.69	2.73
22	0.28	0.31	1.39	1.44	2.96	2.94
23	0.23	0.22	1.17	1.21	3.08	3.00
24	0.42	0.42	1.57	1.58	3.24	3.24
25	0.26	0.26	1.50	1.51	2.92	2.91
26	0.52	0.52	2.25	2.25	2.66	2.66
27	0.39	0.43	2.01	2.10	2.70	2.70
28	0.30	0.29	2.56	2.56	2.45	2.41
29	0.41	0.42	1.93	1.93	2.68	2.68
30	0.29	0.27	2.07	2.08	2.55	2.49
31	0.29	0.32	1.14	1.18	3.02	3.10
32	0.50	0.54	2.05	2.12	2.60	2.63
33	0.40	0.41	1.93	1.99	2.84	2.81
34	0.19	0.21	0.46	0.49	4.08	4.20
35	0.25	0.27	2.07	2.16	2.53	2.55
36	0.40	0.45	1.63	1.68	2.85	2.95
37	0.52	0.57	1.86	1.97	2.59	2.68
38	0.49	0.49	1.86	1.86	2.93	2.94
39	0.32	0.35	2.04	2.13	2.56	2.57
40	0.49	0.49	1.84	1.85	2.94	2.95
41	0.34	0.34	1.79	1.80	2.93	2.93
42	0.31	0.31	1.42	1.42	3.04	3.04
43	0.33	0.33	2.51	2.52	2.41	2.41
44	0.31	0.33	1.48	1.54	2.95	2.96
45	0.31	0.33	2.12	2.26	2.44	2.42
46	0.33	0.35	1.37	1.35	3.00	3.02
47	0.34	0.35	1.23	1.26	3.14	3.12
48	0.34	0.36	1.43	1.50	2.82	2.80
49	0.30	0.30	2.58	2.59	2.51	2.41
50	0.30	0.31	1.37	1.43	2.95	2.83
51	0.37	0.37	1.95	1.95	2.63	2.62
52	0.23	0.26	1.43	1.51	2.61	2.72
53	0.34	0.38	1.68	1.80	2.77	2.72
54	0.28	0.29	1.48	1.64	2.69	2.66
55	0.51	0.51	1.77	1.78	3.00	3.00
56	0.34	0.35	3.47	3.56	2.46	2.54
57	0.32	0.34	1.33	1.42	2.87	2.89
58	0.35	0.35	1.21	1.25	3.15	3.12

1						
2						
3	0.31	0.33	2.11	2.18	2.48	2.46
4	0.31	0.31	2.67	2.82	2.32	2.43
5	0.33	0.33	1.02	1.05	3.31	3.31
6	0.18	0.20	0.77	0.81	2.81	2.88
7	0.55	0.61	2.06	2.11	2.64	2.76
8	0.19	0.21	1.18	1.26	2.87	3.01
9	0.52	0.52	2.24	2.25	2.65	2.66
10	0.33	0.33	2.72	2.73	2.43	2.43
11	0.33	0.36	1.40	1.49	2.79	2.83
12	0.38	0.38	3.74	3.74	2.63	2.63
13	0.34	0.34	1.72	1.73	2.92	2.91
14	0.26	0.29	1.27	1.36	3.08	3.07
15	0.29	0.31	2.48	2.60	2.34	2.39
16	0.39	0.41	1.51	1.69	3.00	3.04
17	0.30	0.33	1.73	1.83	2.60	2.61
18	0.22	0.22	1.00	1.02	2.84	2.83
19	0.29	0.31	1.82	2.01	2.50	2.50
20	0.44	0.44	1.59	1.60	3.31	3.32
21	0.27	0.28	1.41	1.44	2.96	2.97
22	0.35	0.38	1.41	1.45	2.96	3.03
23	0.25	0.26	1.73	1.82	2.62	2.67
24	0.31	0.32	1.49	1.63	2.82	2.75
25	0.27	0.29	2.21	2.34	2.41	2.45
26	0.27	0.27	1.22	1.22	3.23	3.23
27	0.20	0.22	1.01	1.05	2.58	2.67
28	0.38	0.40	2.21	2.27	2.56	2.59
29	0.35	0.35	1.47	1.47	3.21	3.10
30	0.41	0.42	1.53	1.55	3.22	3.21
31	0.36	0.36	2.40	2.40	2.40	2.40
32	0.35	0.35	1.58	1.58	2.90	2.90
33	0.20	0.22	1.01	1.05	2.60	2.71
34	0.33	0.33	1.78	1.79	2.92	2.92
35	0.82	0.82	2.40	2.40	2.83	2.84
36	0.29	0.31	2.48	2.61	2.33	2.39
37	0.65	0.74	2.23	2.31	2.67	2.75
38	0.37	0.41	1.33	1.38	3.04	3.03
39	0.28	0.31	1.52	1.60	2.99	3.01
40	0.41	0.41	1.43	1.44	3.16	3.16
41	0.32	0.34	1.33	1.42	2.86	2.88
42	0.32	0.34	1.33	1.42	2.87	2.89
43	0.34	0.37	1.43	1.45	3.06	3.13
44	0.62	0.65	2.27	2.31	2.76	2.61
45	0.33	0.33	2.04	2.04	2.72	2.72
46	0.37	0.41	1.57	1.66	3.06	3.06
47	0.34	0.35	2.28	2.42	2.36	2.36
48	0.32	0.31	2.00	2.01	2.56	2.50
49	0.20	0.20	0.64	0.64	2.88	2.88
50	0.25	0.26	1.73	1.83	2.61	2.67
51	0.40	0.44	1.44	1.50	2.89	3.03
52	0.35	0.36	1.49	1.50	3.25	3.13
53	0.40	0.45	1.63	1.69	2.85	2.95
54	0.26	0.25	1.79	1.76	2.74	2.64
55	0.41	0.41	1.47	1.52	3.18	3.16
56	0.31	0.33	1.48	1.54	2.95	2.96
57	0.41	0.41	1.43	1.43	3.17	3.17
58	0.25	0.28	1.65	1.72	2.46	2.53

1						
2						
3	0.33	0.34	1.49	1.57	2.96	2.91
4	0.30	0.31	1.13	1.14	3.07	3.12
5	0.32	0.36	1.44	1.52	2.73	2.76
6	0.32	0.36	1.71	1.84	2.64	2.62
7	0.31	0.33	1.51	1.53	2.95	2.96
8	0.22	0.24	0.93	1.03	3.32	3.35
9	0.36	0.36	1.62	1.62	2.98	2.98
10	0.45	0.51	1.72	1.76	2.80	2.93
11	0.34	0.34	1.51	1.57	2.96	2.92
12	0.41	0.41	1.35	1.36	3.22	3.22
13	0.29	0.29	2.24	2.25	2.57	2.56
14	0.36	0.36	2.79	2.82	2.35	2.33
15	0.29	0.33	2.60	2.71	2.36	2.38
16	0.41	0.41	1.42	1.44	3.16	3.15
17	0.26	0.28	1.15	1.27	3.11	3.22
18	0.26	0.26	1.08	1.08	3.33	3.34
19	0.25	0.28	1.64	1.73	2.41	2.53
20	0.53	0.62	1.91	1.98	2.66	2.80
21	0.28	0.27	2.06	2.09	2.56	2.50
22	0.60	0.60	2.00	2.01	3.12	3.13
23	0.36	0.36	2.28	2.30	2.49	2.48
24	0.47	0.47	2.21	2.22	2.72	2.72
25	0.38	0.38	3.71	3.73	2.64	2.61
26	0.29	0.33	2.54	2.69	2.38	2.38
27	0.18	0.20	0.77	0.81	2.81	2.88
28	0.46	0.45	2.18	2.20	2.68	2.66
29	0.33	0.33	2.04	2.05	2.72	2.71
30	0.27	0.28	1.95	2.09	2.41	2.51
31	0.39	0.39	1.92	1.98	2.60	2.55
32	0.41	0.41	1.53	1.58	3.22	3.20
33	0.33	0.33	2.73	2.73	2.44	2.44
34	0.37	0.37	2.83	2.83	2.40	2.40
35	0.31	0.31	2.55	2.56	2.48	2.38
36	0.31	0.31	1.41	1.41	3.13	3.13
37	0.42	0.39	2.22	2.21	2.61	2.53
38	0.28	0.31	1.79	1.90	2.65	2.71
39	0.36	0.37	1.81	1.83	2.91	2.90
40	0.68	0.74	2.35	2.39	2.55	2.60
41	0.64	0.71	2.31	2.38	2.58	2.64
42	0.35	0.38	2.64	2.74	2.80	2.82
43	0.21	0.21	0.85	0.85	2.94	2.95
44	0.37	0.40	1.51	1.55	3.01	3.17
45	0.24	0.27	1.19	1.27	3.11	3.10
46	0.53	0.61	1.92	1.97	2.70	2.80
47	0.29	0.29	2.15	2.15	2.61	2.61
48	0.21	0.21	1.03	1.03	2.61	2.61
49	0.37	0.41	1.33	1.38	3.04	3.03
50	0.31	0.34	1.38	1.44	3.11	3.12
51	0.25	0.27	2.07	2.16	2.52	2.55
52	0.42	0.42	1.37	1.38	2.99	2.99
53	0.37	0.40	2.20	2.28	2.55	2.60
54	0.16	0.19	1.01	1.02	2.42	2.51
55	0.57	0.58	1.95	1.97	2.75	2.72
56	0.80	0.86	2.39	2.41	2.58	2.60
57	0.29	0.32	2.55	2.65	2.44	2.39
58	0.71	0.72	2.31	2.34	2.76	2.76

1						
2						
3	0.34	0.34	1.97	1.98	2.79	2.78
4	0.34	0.34	1.08	1.08	3.38	3.38
5	0.27	0.30	2.21	2.36	2.45	2.43
6	0.51	0.59	1.88	1.97	2.73	2.89
7	0.29	0.29	2.24	2.25	2.57	2.57
8	0.20	0.21	0.96	0.99	2.65	2.73
9	0.30	0.32	2.49	2.65	2.25	2.34
10	0.33	0.33	1.98	2.01	2.80	2.77
11	0.34	0.35	1.25	1.29	3.14	3.12
12	0.30	0.32	1.04	1.10	3.12	3.12
13	0.37	0.41	1.33	1.38	3.04	3.03
14	0.29	0.29	2.15	2.15	2.61	2.60
15	0.32	0.31	2.61	2.60	2.38	2.35
16	0.43	0.44	1.61	1.64	3.17	3.17
17	0.42	0.42	3.49	3.50	2.43	2.43
18	0.29	0.33	2.61	2.70	2.37	2.38
19	0.34	0.35	3.46	3.55	2.46	2.54
20	0.29	0.30	2.49	2.54	2.43	2.36
21	0.26	0.28	1.24	1.33	3.13	3.11
22	0.52	0.49	1.92	1.91	2.81	2.71
23	0.37	0.37	2.83	2.83	2.40	2.40
24	0.37	0.40	2.20	2.28	2.53	2.60
25	0.31	0.31	2.46	2.47	2.48	2.48
26	0.41	0.44	2.03	2.12	2.70	2.71
27	0.58	0.59	1.81	1.89	2.90	2.87
28	0.34	0.34	1.98	1.98	2.79	2.79
29	0.29	0.33	2.54	2.69	2.39	2.38
30	0.31	0.31	2.47	2.47	2.49	2.49
31	0.36	0.37	1.45	1.55	2.84	2.80
32	0.43	0.46	1.70	1.78	2.93	2.93
33	0.33	0.35	1.08	1.11	3.08	3.14
34	0.35	0.35	1.40	1.39	3.11	3.04
35	0.29	0.29	2.24	2.24	2.56	2.56
36	0.32	0.32	1.95	1.99	2.67	2.63
37	0.28	0.29	2.21	2.24	2.55	2.52
38	0.43	0.47	2.08	2.16	2.62	2.64
39	0.33	0.34	2.01	2.02	2.80	2.78
40	0.31	0.33	1.86	2.00	2.69	2.62
41	0.33	0.33	2.73	2.73	2.44	2.44
42	0.39	0.43	2.01	2.10	2.70	2.70
43	0.34	0.34	1.74	1.75	2.95	2.95
44	0.38	0.38	1.48	1.48	3.13	3.13
45	0.37	0.40	2.20	2.28	2.54	2.60
46	0.29	0.29	2.13	2.14	2.60	2.59
47	0.31	0.31	1.40	1.40	3.13	3.13
48	0.36	0.36	1.60	1.62	2.97	2.97
49	0.35	0.36	2.76	2.80	2.38	2.34
50	0.55	0.61	2.07	2.13	2.61	2.75
51	0.82	0.82	2.39	2.40	2.83	2.84
52	0.48	0.55	1.77	1.82	2.65	2.78
53	0.27	0.30	2.21	2.35	2.47	2.43
54	0.36	0.36	1.53	1.53	2.83	2.83
55	0.29	0.31	1.01	1.04	3.19	3.25
56	0.35	0.38	1.39	1.37	2.99	3.04
57	0.37	0.41	1.44	1.52	2.91	2.88
58	0.52	0.52	2.25	2.25	2.66	2.66

1						
2						
3	0.40	0.40	1.60	1.63	2.83	2.82
4	0.61	0.66	1.91	2.10	2.65	2.77
5	0.20	0.22	1.01	1.05	2.58	2.67
6	0.57	0.58	1.89	1.93	2.71	2.73
7	0.62	0.67	2.27	2.31	2.81	2.66
8	0.38	0.38	1.37	1.38	3.20	3.20
9	0.37	0.37	2.84	2.84	2.37	2.37
10	0.27	0.27	1.34	1.33	2.93	2.93
11	0.31	0.31	1.41	1.41	3.13	3.13
12	0.31	0.33	1.47	1.54	2.95	2.96
13	0.28	0.31	1.80	1.89	2.78	2.80
14	0.34	0.34	1.79	1.80	2.93	2.93
15	0.28	0.28	1.89	1.90	2.71	2.69
16	0.30	0.33	2.60	2.71	2.35	2.38
17	0.37	0.37	1.17	1.18	3.20	3.21
18	0.27	0.30	2.21	2.32	2.50	2.45
19	0.37	0.37	1.52	1.50	3.16	3.06
20	0.29	0.31	1.76	1.88	2.76	2.77
21	0.32	0.33	1.84	1.88	2.83	2.80
22	0.32	0.33	1.30	1.30	3.01	3.00
23	0.28	0.31	1.81	1.90	2.78	2.79
24	0.22	0.24	1.03	1.08	3.45	3.45
25	0.50	0.52	1.84	1.87	3.04	2.87
26	0.46	0.48	1.60	1.69	2.91	2.95
27	0.30	0.34	1.72	1.83	2.58	2.60
28	0.31	0.34	1.40	1.44	3.12	3.12
29	0.31	0.32	2.53	2.69	2.26	2.37
30	0.29	0.31	1.87	1.97	2.74	2.75
31	0.22	0.22	1.34	1.36	3.14	3.12
32	0.28	0.28	1.94	1.97	2.74	2.70
33	0.28	0.31	1.62	1.73	2.76	2.82
34	0.27	0.28	2.20	2.24	2.50	2.42
35	0.29	0.33	2.54	2.68	2.40	2.38
36	0.31	0.32	2.32	2.50	2.35	2.41
37	0.31	0.31	1.82	1.83	2.63	2.62
38	0.31	0.34	2.09	2.19	2.45	2.46
39	0.23	0.25	1.46	1.52	3.06	3.08
40	0.28	0.31	1.81	1.91	2.77	2.79
41	0.28	0.31	1.47	1.52	3.07	3.06
42	0.36	0.40	1.31	1.37	2.91	3.06
43	0.19	0.21	0.90	0.94	2.76	2.84
44	0.36	0.36	2.39	2.40	2.40	2.39
45	0.34	0.38	1.48	1.51	3.07	3.15
46	0.31	0.31	2.46	2.47	2.48	2.48
47	0.29	0.32	1.43	1.55	2.89	2.89
48	0.35	0.35	2.22	2.27	2.41	2.39
49	0.22	0.22	0.98	0.98	2.92	2.92
50	0.21	0.22	0.98	1.04	2.76	2.88
51	0.20	0.21	1.01	1.04	2.60	2.67
52	0.27	0.30	1.17	1.25	3.14	3.16
53	0.21	0.22	0.44	0.44	2.58	2.58
54	0.29	0.31	1.02	1.06	3.26	3.26
55	0.27	0.29	2.21	2.34	2.41	2.45
56	0.34	0.34	1.55	1.58	3.04	3.02
57	0.40	0.44	1.85	1.90	2.85	2.83
58	0.60	0.60	1.98	1.99	2.76	2.75

1						
2						
3	0.21	0.22	1.34	1.34	3.06	3.06
4	0.30	0.30	2.51	2.49	2.41	2.33
5	0.58	0.63	2.16	2.20	2.68	2.70
6	0.26	0.29	2.18	2.25	2.53	2.44
7	0.34	0.36	3.53	3.74	2.49	2.57
8	0.31	0.33	2.11	2.18	2.48	2.46
9	0.16	0.19	1.02	1.02	2.42	2.51
10	0.42	0.39	2.22	2.21	2.62	2.53
11	0.38	0.38	2.13	2.15	2.63	2.61
12	0.31	0.34	2.09	2.19	2.45	2.46
13	0.29	0.29	1.53	1.53	2.98	2.98
14	0.30	0.33	2.10	2.21	2.50	2.44
15	0.31	0.31	2.47	2.47	2.49	2.49
16	0.77	0.78	2.39	2.54	2.58	2.55
17	0.32	0.35	3.47	3.61	2.48	2.56
18	0.28	0.28	1.87	1.90	2.70	2.67
19	0.16	0.19	0.90	0.92	2.58	2.66
20	0.16	0.17	0.28	0.31	3.65	3.57
21	0.35	0.36	1.58	1.61	2.97	2.96
22	0.34	0.35	1.35	1.33	3.06	2.99
23	0.23	0.23	1.03	1.03	2.81	2.81
24	0.39	0.40	1.51	1.63	3.16	3.10
25	0.33	0.33	2.73	2.73	2.44	2.44
26	0.52	0.52	2.25	2.25	2.66	2.66
27	0.31	0.34	1.34	1.40	2.87	2.93
28	0.16	0.19	1.01	1.02	2.42	2.51
29	0.17	0.19	1.03	1.04	2.45	2.55
30	0.30	0.33	2.60	2.71	2.36	2.38
31	0.30	0.33	2.60	2.71	2.36	2.38
32	0.30	0.33	2.60	2.71	2.35	2.38
33	0.23	0.25	1.46	1.56	2.95	3.04
34	0.38	0.38	1.43	1.44	3.01	3.01
35	0.29	0.31	2.48	2.61	2.33	2.39
36	0.33	0.32	2.46	2.50	2.39	2.36
37	0.28	0.30	2.24	2.39	2.31	2.40
38	0.34	0.38	1.41	1.42	3.03	3.10
39	0.29	0.31	1.20	1.25	3.02	3.03
40	0.20	0.21	1.19	1.29	2.85	2.95
41	0.30	0.33	2.60	2.71	2.36	2.38
42	0.59	0.59	1.85	1.87	2.93	2.93
43	0.58	0.63	2.16	2.20	2.67	2.70
44	0.29	0.29	2.15	2.15	2.60	2.60
45	0.33	0.33	1.16	1.18	3.12	3.12
46	0.25	0.27	1.73	1.84	2.54	2.64
47	0.29	0.33	2.54	2.69	2.38	2.38
48	0.26	0.29	1.09	1.17	2.96	3.09
49	0.18	0.20	0.77	0.81	2.81	2.88
50	0.28	0.28	1.89	1.90	2.71	2.69
51	0.27	0.29	2.19	2.30	2.53	2.45
52	0.30	0.33	2.60	2.71	2.36	2.38
53	0.52	0.52	2.24	2.24	2.65	2.65
54	0.66	0.66	2.04	2.06	3.05	3.06
55	0.30	0.33	2.12	2.23	2.47	2.43
56	0.37	0.40	2.20	2.28	2.55	2.60
57	0.34	0.38	3.21	3.34	2.32	2.38
58	0.30	0.33	2.60	2.71	2.36	2.38



1						
2						
3	0.60	0.60	1.98	1.99	2.76	2.75
4	0.30	0.32	2.63	2.69	2.40	2.38
5	0.28	0.31	1.80	1.89	2.78	2.80
6	0.30	0.30	1.05	1.03	3.14	3.18
7	0.43	0.48	2.07	2.16	2.62	2.64
8	0.31	0.34	1.53	1.62	2.94	2.91
9	0.26	0.28	2.19	2.25	2.50	2.42
10	0.34	0.37	1.49	1.49	3.15	3.17
11	0.33	0.37	1.36	1.36	2.94	2.99
12	0.29	0.31	2.48	2.60	2.34	2.39
13	0.31	0.30	2.42	2.45	2.45	2.42
14	0.66	0.73	2.01	2.11	2.64	2.71
15	0.39	0.44	1.82	1.91	2.81	2.82
16	0.34	0.34	1.98	1.99	2.78	2.77
17	0.26	0.27	1.93	2.02	2.53	2.56
18	0.34	0.34	1.79	1.80	2.93	2.93
19	0.29	0.31	2.48	2.60	2.34	2.39
20	0.29	0.32	2.53	2.62	2.48	2.40
21	0.28	0.31	1.53	1.60	3.00	3.01
22	0.29	0.33	2.60	2.71	2.36	2.38
23	0.49	0.55	1.40	1.44	3.03	3.18
24	0.36	0.40	1.63	1.75	2.81	2.76
25	0.31	0.33	1.85	1.99	2.69	2.62
26	0.49	0.49	1.82	1.83	2.92	2.93
27	0.52	0.57	1.87	1.98	2.61	2.71
28	0.28	0.31	1.64	1.72	2.90	2.92
29	0.25	0.27	1.16	1.24	2.81	2.86
30	0.13	0.17	0.65	0.64	2.60	2.58
31	0.25	0.29	1.09	1.16	2.97	3.09
32	0.27	0.30	1.13	1.18	2.93	3.02
33	0.81	0.82	2.38	2.41	2.82	2.82
34	0.81	0.82	2.38	2.41	2.82	2.82
35	0.31	0.33	2.12	2.26	2.44	2.42
36	0.29	0.33	2.54	2.69	2.38	2.37
37	0.30	0.33	2.60	2.71	2.36	2.38
38	0.36	0.36	2.81	2.82	2.69	2.66
39	0.38	0.38	1.10	1.11	3.14	3.14
40	0.33	0.36	3.51	3.71	2.48	2.56
41	0.37	0.37	2.83	2.83	2.40	2.40
42	0.32	0.32	2.75	2.78	2.45	2.43
43	0.33	0.35	1.09	1.10	3.08	3.13
44	0.30	0.30	1.36	1.41	3.05	3.01
45	0.35	0.37	1.52	1.53	3.18	3.18
46	0.29	0.32	1.45	1.51	3.01	2.98
47	0.12	0.14	0.58	0.61	2.80	2.73
48	0.25	0.28	1.64	1.73	2.41	2.52
49	0.37	0.40	2.20	2.28	2.53	2.60
50	0.45	0.46	2.12	2.13	2.71	2.65
51	0.33	0.36	1.36	1.38	2.93	3.00
52	0.33	0.35	3.47	3.58	2.47	2.55
53	0.50	0.56	1.89	1.95	2.76	2.91
54	0.37	0.38	1.47	1.48	3.12	3.12
55	0.25	0.26	1.61	1.65	2.66	2.55
56	0.50	0.50	1.77	1.77	2.99	2.99
57	0.33	0.35	2.18	2.35	2.33	2.38
58	0.35	0.35	1.41	1.41	3.17	3.08

1						
2						
3	0.30	0.32	1.86	2.01	2.70	2.67
4	0.30	0.32	1.20	1.25	3.01	3.04
5	0.36	0.39	1.29	1.35	2.97	2.98
6	0.20	0.21	0.96	1.00	2.70	2.78
7	0.29	0.31	1.76	1.87	2.77	2.78
8	0.33	0.37	1.36	1.36	2.95	3.01
9	0.34	0.38	1.50	1.54	3.07	3.16
10	0.37	0.37	1.51	1.51	2.90	2.90
11	0.35	0.37	1.36	1.32	3.01	3.01
12	0.36	0.40	1.90	1.98	2.80	2.78
13	0.28	0.31	1.82	1.90	2.78	2.79
14	0.34	0.37	1.69	1.80	2.79	2.72
15	0.33	0.37	1.36	1.36	2.94	3.00
16	0.35	0.35	1.34	1.35	3.23	3.24
17	0.31	0.31	1.31	1.31	3.20	3.20
18	0.29	0.31	2.53	2.57	2.47	2.38
19	0.41	0.41	1.47	1.48	3.20	3.20
20	0.27	0.30	2.21	2.36	2.44	2.43
21	0.30	0.31	1.02	1.05	3.17	3.21
22	0.29	0.32	1.87	2.05	2.53	2.55
23	0.33	0.33	2.72	2.73	2.44	2.43
24	0.62	0.62	2.01	2.04	3.05	3.06
25	0.61	0.58	1.91	1.92	2.74	2.73
26	0.37	0.41	1.32	1.48	2.89	3.06
27	0.30	0.33	2.60	2.71	2.36	2.38
28	0.38	0.38	1.10	1.10	3.15	3.15
29	0.28	0.28	1.27	1.32	3.20	3.07
30	0.16	0.19	1.01	1.02	2.41	2.50
31	0.55	0.55	1.83	1.83	3.03	3.03
32	0.60	0.60	1.99	2.02	3.10	3.11
33	0.82	0.82	2.39	2.40	2.83	2.83
34	0.25	0.27	2.06	2.16	2.48	2.53
35	0.31	0.33	2.10	2.19	2.46	2.46
36	0.65	0.73	2.23	2.31	2.67	2.75
37	0.20	0.21	1.02	1.04	2.54	2.55
38	0.78	0.78	2.44	2.45	2.71	2.71
39	0.44	0.44	1.41	1.45	3.01	3.00
40	0.27	0.27	1.37	1.39	3.00	2.96
41	0.20	0.20	0.63	0.64	2.82	2.86
42	0.43	0.43	2.34	2.36	2.63	2.62
43	0.54	0.58	1.27	1.36	3.07	3.12
44	0.41	0.41	1.90	1.93	2.66	2.65
45	0.37	0.40	1.51	1.55	3.02	3.16
46	0.35	0.37	1.44	1.51	2.71	2.76
47	0.46	0.47	1.73	1.82	2.73	2.90
48	0.31	0.34	1.34	1.38	2.89	2.95
49	0.57	0.52	2.11	2.07	2.70	2.60
50	0.30	0.32	1.19	1.21	3.01	3.06
51	0.29	0.31	1.77	1.88	2.77	2.78
52	0.41	0.41	3.42	3.46	2.41	2.37
53	0.46	0.47	1.71	1.74	2.86	2.95
54	0.28	0.30	1.88	1.92	2.79	2.78
55	0.29	0.31	1.56	1.62	2.93	2.91
56	0.40	0.40	1.35	1.39	3.07	3.03
57	0.31	0.31	1.46	1.46	3.06	3.06
58	0.31	0.30	2.41	2.45	2.45	2.41

1						
2						
3	0.32	0.32	1.58	1.58	2.90	2.90
4	0.26	0.28	0.94	1.00	3.43	3.45
5	0.30	0.33	2.02	2.13	2.55	2.52
6	0.30	0.30	1.67	1.67	2.75	2.75
7	0.46	0.48	1.60	1.69	2.91	2.95
8	0.32	0.32	1.57	1.58	2.89	2.89
9	0.31	0.31	1.46	1.46	3.06	3.06
10	0.31	0.30	1.35	1.39	2.97	2.87
11	0.30	0.33	2.60	2.71	2.35	2.38
12	0.35	0.36	1.39	1.38	3.20	3.10
13	0.29	0.33	2.54	2.69	2.38	2.38
14	0.27	0.29	2.21	2.34	2.41	2.45
15	0.36	0.36	1.91	1.96	2.61	2.56
16	0.32	0.32	1.35	1.35	3.16	3.16
17	0.29	0.32	1.77	1.89	2.63	2.67
18	0.51	0.58	1.88	1.95	2.76	2.89
19	0.32	0.34	2.08	2.23	2.33	2.41
20	0.23	0.23	1.07	1.09	2.75	2.75
21	0.26	0.28	2.19	2.26	2.50	2.43
22	0.35	0.38	1.38	1.37	2.98	3.04
23	0.18	0.20	0.77	0.81	2.81	2.87
24	0.64	0.74	2.19	2.28	2.63	2.72
25	0.28	0.31	2.23	2.39	2.35	2.39
26	0.25	0.27	2.07	2.16	2.52	2.55
27	0.29	0.31	2.48	2.61	2.33	2.39
28	0.29	0.33	2.61	2.70	2.38	2.38
29	0.33	0.36	2.06	2.21	2.44	2.53
30	0.32	0.34	1.13	1.21	2.96	3.03
31	0.46	0.47	1.69	1.75	2.82	2.97
32	0.16	0.19	1.02	1.02	2.42	2.51
33	0.25	0.27	2.07	2.16	2.53	2.55
34	0.62	0.62	1.45	1.46	3.16	3.17
35	0.41	0.42	1.60	1.63	3.24	3.23
36	0.36	0.40	1.90	1.97	2.81	2.78
37	0.24	0.27	1.10	1.18	3.19	3.20
38	0.35	0.36	2.35	2.39	2.39	2.36
39	0.30	0.32	1.15	1.19	3.02	3.08
40	0.56	0.58	1.87	1.93	2.70	2.73
41	0.54	0.55	1.40	1.41	3.28	3.29
42	0.33	0.36	1.37	1.45	2.82	2.85
43	0.34	0.34	1.67	1.67	2.88	2.88
44	0.29	0.33	2.61	2.71	2.37	2.38
45	0.47	0.47	2.21	2.21	2.72	2.72
46	0.34	0.38	1.48	1.52	3.07	3.15
47	0.23	0.23	0.51	0.51	4.26	4.31
48	0.70	0.71	2.05	2.06	2.93	2.94
49	0.58	0.64	2.17	2.23	2.59	2.69
50	0.35	0.35	1.44	1.45	3.18	3.10
51	0.36	0.36	1.62	1.62	2.98	2.98
52	0.41	0.41	1.43	1.44	3.16	3.16
53	0.34	0.37	1.49	1.50	3.12	3.16
54	0.34	0.34	1.79	1.80	2.93	2.93
55	0.38	0.41	2.23	2.36	2.46	2.58
56	0.35	0.36	1.39	1.38	3.16	3.07
57	0.55	0.62	2.07	2.13	2.60	2.75
58	0.41	0.41	1.35	1.36	3.22	3.22

1						
2						
3	0.28	0.28	1.92	1.92	2.73	2.73
4	0.26	0.29	1.26	1.36	3.07	3.07
5	0.33	0.33	1.40	1.40	2.97	2.97
6	0.37	0.37	2.83	2.84	2.36	2.36
7	0.21	0.21	0.84	0.86	2.91	2.90
8	0.30	0.32	1.48	1.50	3.00	2.98
9	0.36	0.38	1.31	1.41	2.90	2.96
10	0.36	0.36	1.37	1.36	3.03	2.98
11	0.62	0.63	1.96	1.99	2.80	2.73
12	0.31	0.30	2.40	2.45	2.44	2.40
13	0.28	0.29	1.92	1.87	2.84	2.74
14	0.34	0.37	1.43	1.51	2.79	2.81
15	0.35	0.35	2.31	2.40	2.38	2.33
16	0.40	0.40	1.98	1.99	2.68	2.68
17	0.27	0.29	2.21	2.30	2.46	2.45
18	0.42	0.42	1.36	1.36	3.10	3.10
19	0.50	0.55	1.40	1.44	3.02	3.18
20	0.31	0.31	2.47	2.47	2.49	2.49
21	0.27	0.29	1.41	1.51	2.99	2.97
22	0.34	0.37	1.43	1.52	2.77	2.81
23	0.24	0.24	1.44	1.48	3.09	3.02
24	0.66	0.69	2.32	2.34	2.77	2.59
25	0.30	0.33	2.60	2.71	2.36	2.38
26	0.37	0.41	1.34	1.38	3.04	3.03
27	0.37	0.37	1.84	1.84	2.93	2.93
28	0.36	0.40	1.52	1.57	3.02	3.10
29	0.30	0.33	0.73	0.76	3.68	3.78
30	0.37	0.41	2.21	2.33	2.44	2.56
31	0.33	0.33	2.48	2.50	2.40	2.38
32	0.34	0.36	1.72	1.76	2.88	2.75
33	0.33	0.33	2.73	2.73	2.44	2.44
34	0.27	0.30	1.77	1.87	2.55	2.62
35	0.30	0.31	1.03	1.05	3.27	3.25
36	0.31	0.31	2.47	2.47	2.48	2.48
37	0.28	0.28	1.93	1.97	2.73	2.69
38	0.31	0.31	2.47	2.47	2.48	2.48
39	0.43	0.48	2.07	2.16	2.61	2.64
40	0.28	0.28	1.15	1.16	3.25	3.26
41	0.27	0.29	1.41	1.49	2.74	2.79
42	0.31	0.31	2.46	2.47	2.48	2.48
43	0.34	0.34	1.07	1.09	3.36	3.36
44	0.54	0.54	1.81	1.84	3.01	3.02
45	0.34	0.37	1.68	1.80	2.78	2.72
46	0.34	0.38	3.20	3.35	2.32	2.38
47	0.50	0.54	2.05	2.12	2.61	2.63
48	0.47	0.48	1.62	1.68	2.92	2.95
49	0.25	0.27	2.07	2.16	2.53	2.55
50	0.32	0.33	1.87	2.00	2.71	2.62
51	0.25	0.27	2.07	2.16	2.52	2.55
52	0.40	0.40	1.39	1.39	3.08	3.08
53	0.64	0.71	1.73	1.74	3.00	3.15
54	0.16	0.19	1.01	1.02	2.42	2.51
55	0.36	0.36	1.62	1.62	2.98	2.98
56	0.28	0.31	1.64	1.72	2.90	2.92
57	0.32	0.32	1.46	1.46	3.06	3.06
58	0.40	0.41	1.29	1.36	3.03	2.95

1						
2						
3	0.33	0.34	1.34	1.42	2.78	2.83
4	0.42	0.42	1.61	1.62	3.26	3.26
5	0.29	0.31	1.92	1.96	2.79	2.77
6	0.30	0.31	1.04	1.07	3.16	3.18
7	0.59	0.59	1.97	1.98	2.76	2.74
8	0.36	0.39	1.29	1.35	2.97	2.98
9	0.26	0.27	1.93	2.04	2.50	2.55
10	0.68	0.72	2.33	2.36	2.65	2.61
11	0.38	0.38	1.12	1.13	3.19	3.19
12	0.28	0.30	1.86	1.89	2.81	2.80
13	0.30	0.32	2.63	2.68	2.40	2.38
14	0.30	0.32	1.54	1.66	2.89	2.94
15	0.34	0.34	2.07	2.07	2.66	2.55
16	0.29	0.29	1.28	1.28	3.16	3.16
17	0.41	0.41	1.47	1.47	3.20	3.20
18	0.40	0.40	1.60	1.63	2.83	2.82
19	0.21	0.24	0.94	1.00	3.44	3.38
20	0.66	0.66	2.04	2.06	3.05	3.05
21	0.37	0.41	1.33	1.38	3.04	3.03
22	0.30	0.33	1.02	1.10	2.92	3.06
23	0.33	0.33	2.67	2.71	2.40	2.37
24	0.29	0.33	2.54	2.67	2.41	2.38
25	0.29	0.31	2.49	2.59	2.37	2.39
26	0.38	0.38	3.74	3.75	2.63	2.63
27	0.34	0.35	1.72	1.72	2.89	2.75
28	0.27	0.29	2.21	2.34	2.41	2.45
29	0.32	0.35	2.04	2.14	2.55	2.57
30	0.69	0.74	2.34	2.48	2.47	2.55
31	0.37	0.40	2.20	2.28	2.55	2.60
32	0.25	0.28	1.23	1.31	3.05	3.05
33	0.29	0.31	1.77	1.88	2.76	2.77
34	0.55	0.58	1.87	1.94	2.69	2.73
35	0.37	0.37	2.17	2.21	2.54	2.52
36	0.50	0.56	1.89	1.96	2.74	2.91
37	0.26	0.29	2.18	2.29	2.55	2.45
38	0.14	0.16	0.63	0.63	2.80	2.79
39	0.44	0.44	2.36	2.37	2.66	2.66
40	0.31	0.33	0.89	0.92	3.43	3.40
41	0.50	0.56	1.89	1.95	2.75	2.91
42	0.82	0.82	2.40	2.40	2.83	2.84
43	0.29	0.31	1.76	1.88	2.76	2.77
44	0.66	0.66	2.05	2.05	3.06	3.06
45	0.43	0.43	2.35	2.36	2.65	2.64
46	0.27	0.30	1.34	1.39	2.98	2.97
47	0.41	0.42	1.57	1.59	3.23	3.23
48	0.48	0.54	1.81	1.83	2.76	2.80
49	0.46	0.48	1.61	1.69	2.91	2.95
50	0.21	0.22	0.44	0.44	2.58	2.58
51	0.31	0.31	2.47	2.47	2.49	2.49
52	0.27	0.29	2.21	2.34	2.40	2.44
53	0.37	0.37	1.34	1.31	3.02	2.96
54	0.39	0.43	2.03	2.09	2.72	2.70
55	0.33	0.36	1.37	1.46	2.82	2.85
56	0.40	0.40	1.61	1.62	2.83	2.83
57	0.28	0.31	1.53	1.60	3.00	3.01
58	0.80	0.86	2.39	2.41	2.57	2.60

1						
2						
3	0.29	0.29	1.30	1.31	2.90	2.90
4	0.31	0.32	2.52	2.69	2.26	2.36
5	0.37	0.38	1.08	1.12	3.12	3.11
6	0.25	0.27	2.07	2.16	2.52	2.55
7	0.58	0.58	2.20	2.20	2.66	2.66
8	0.53	0.61	1.91	1.97	2.69	2.80
9	0.36	0.39	1.52	1.56	3.03	3.10
10	0.60	0.64	1.95	2.14	2.90	2.88
11	0.20	0.21	0.97	1.01	2.64	2.73
12	0.31	0.33	2.02	2.16	2.52	2.51
13	0.31	0.34	1.34	1.38	2.89	2.95
14	0.41	0.40	2.84	2.86	2.83	2.80
15	0.24	0.27	1.75	1.86	2.68	2.71
16	0.34	0.34	1.58	1.59	3.06	3.06
17	0.51	0.58	1.88	1.95	2.76	2.89
18	0.35	0.37	1.49	1.49	3.14	3.16
19	0.38	0.38	3.74	3.74	2.63	2.63
20	0.33	0.33	1.78	1.79	2.92	2.92
21	0.37	0.38	1.34	1.36	3.19	3.18
22	0.29	0.28	2.19	2.20	2.49	2.45
23	0.29	0.32	1.44	1.51	3.01	2.98
24	0.34	0.36	2.68	2.84	2.30	2.32
25	0.28	0.31	1.84	1.90	2.79	2.79
26	0.71	0.76	2.35	2.56	2.50	2.57
27	0.39	0.40	1.57	1.65	2.80	2.77
28	0.26	0.28	1.40	1.48	2.74	2.78
29	0.66	0.69	2.31	2.34	2.77	2.59
30	0.30	0.31	0.99	0.99	3.29	3.34
31	0.36	0.39	1.47	1.58	3.00	3.10
32	0.17	0.19	1.03	1.05	2.49	2.59
33	0.34	0.38	3.20	3.35	2.32	2.38
34	0.46	0.48	1.52	1.65	3.06	3.07
35	0.33	0.33	1.10	1.10	3.22	3.22
36	0.44	0.44	2.07	2.07	2.77	2.77
37	0.30	0.32	1.20	1.25	3.00	3.04
38	0.18	0.22	0.41	0.44	3.73	3.53
39	0.44	0.44	1.43	1.44	3.03	3.03
40	0.62	0.62	2.02	2.03	3.07	3.07
41	0.29	0.33	2.54	2.69	2.39	2.38
42	0.33	0.33	2.51	2.51	2.41	2.40
43	0.51	0.51	1.78	1.78	3.00	3.00
44	0.29	0.31	1.83	1.93	2.76	2.78
45	0.31	0.31	1.41	1.42	3.10	3.09
46	0.53	0.62	1.91	1.98	2.66	2.80
47	0.34	0.36	1.43	1.50	2.82	2.80
48	0.34	0.38	1.48	1.52	3.07	3.15
49	0.37	0.37	2.84	2.84	2.37	2.37
50	0.31	0.34	1.33	1.38	2.88	2.95
51	0.34	0.34	2.00	2.01	2.81	2.81
52	0.35	0.38	1.27	1.32	2.97	2.98
53	0.46	0.51	1.34	1.39	2.98	3.15
54	0.71	0.76	2.35	2.58	2.51	2.56
55	0.21	0.22	1.00	1.05	2.68	2.81
56	0.40	0.40	1.97	1.97	2.61	2.61
57	0.34	0.34	1.20	1.20	3.24	3.24
58	0.39	0.40	1.43	1.53	3.16	3.10

1						
2						
3	0.33	0.33	2.50	2.51	2.41	2.40
4	0.48	0.49	1.97	1.98	2.82	2.82
5	0.24	0.26	1.74	1.84	2.72	2.73
6	0.31	0.32	1.49	1.63	2.81	2.75
7	0.36	0.36	1.55	1.55	2.88	2.88
8	0.37	0.37	2.83	2.83	2.40	2.40
9	0.45	0.47	2.12	2.16	2.66	2.63
10	0.32	0.35	1.97	2.05	2.65	2.64
11	0.42	0.42	2.31	2.35	2.60	2.57
12	0.42	0.45	2.07	2.22	2.57	2.69
13	0.31	0.35	1.42	1.50	2.73	2.76
14	0.26	0.26	1.76	1.79	2.82	2.71
15	0.35	0.38	1.35	1.33	2.94	2.99
16	0.68	0.68	2.19	2.19	2.90	2.90
17	0.55	0.58	1.87	1.94	2.69	2.73
18	0.48	0.48	2.19	2.19	2.70	2.70
19	0.34	0.34	1.77	1.77	2.67	2.67
20	0.37	0.37	2.83	2.84	2.36	2.36
21	0.41	0.41	3.41	3.46	2.41	2.37
22	0.40	0.40	1.61	1.62	2.83	2.83
23	0.29	0.31	2.53	2.59	2.47	2.39
24	0.42	0.42	3.50	3.50	2.43	2.43
25	0.28	0.28	1.21	1.27	3.13	3.19
26	0.37	0.37	2.82	2.82	2.40	2.40
27	0.35	0.37	1.43	1.51	2.74	2.79
28	0.19	0.19	1.19	1.19	2.91	2.87
29	0.25	0.24	1.47	1.47	3.09	3.02
30	0.33	0.33	2.73	2.73	2.44	2.44
31	0.42	0.42	1.31	1.31	3.04	3.04
32	0.18	0.20	0.77	0.80	2.81	2.86
33	0.34	0.38	1.68	1.80	2.77	2.72
34	0.22	0.22	1.29	1.39	3.04	2.96
35	0.38	0.38	1.43	1.44	3.01	3.00
36	0.32	0.32	2.44	2.49	2.39	2.35
37	0.40	0.40	1.98	1.99	2.68	2.68
38	0.27	0.28	1.19	1.20	3.12	3.10
39	0.43	0.43	2.08	2.10	2.79	2.69
40	0.16	0.19	0.85	0.87	2.59	2.66
41	0.44	0.43	2.05	2.07	2.80	2.78
42	0.34	0.38	3.21	3.34	2.33	2.38
43	0.23	0.25	1.36	1.44	2.70	2.80
44	0.31	0.33	1.22	1.28	2.94	3.00
45	0.25	0.26	1.02	1.03	3.17	3.06
46	0.31	0.31	1.82	1.83	2.64	2.63
47	0.44	0.45	1.43	1.44	3.03	3.03
48	0.43	0.49	1.70	1.76	2.81	2.92
49	0.34	0.32	1.39	1.44	3.00	2.87
50	0.37	0.37	2.10	2.14	2.60	2.57
51	0.32	0.32	1.45	1.50	3.01	2.89
52	0.72	0.72	2.32	2.32	2.77	2.78
53	0.44	0.44	2.37	2.37	2.67	2.67
54	0.23	0.23	1.03	1.04	2.86	2.86
55	0.31	0.33	2.02	2.17	2.49	2.50
56	0.35	0.35	2.73	2.80	2.36	2.32
57	0.38	0.38	1.43	1.44	3.01	3.01
58	0.36	0.37	1.38	1.37	3.14	3.03

1						
2						
3	0.59	0.65	2.18	2.24	2.57	2.69
4	0.41	0.45	2.03	2.18	2.57	2.66
5	0.33	0.33	1.78	1.79	2.92	2.92
6	0.15	0.16	0.99	1.00	2.41	2.39
7	0.34	0.37	1.43	1.52	2.78	2.81
8	0.28	0.28	1.88	1.90	2.71	2.68
9	0.43	0.43	1.42	1.42	3.00	3.00
10	0.37	0.41	1.44	1.52	2.92	2.88
11	0.33	0.34	1.65	1.67	2.87	2.84
12	0.43	0.47	2.08	2.16	2.62	2.64
13	0.19	0.21	0.89	0.93	2.73	2.81
14	0.33	0.33	1.09	1.11	3.19	3.20
15	0.37	0.37	2.83	2.84	2.36	2.36
16	0.36	0.40	1.99	2.08	2.68	2.70
17	0.29	0.30	1.39	1.38	3.05	3.01
18	0.27	0.30	1.13	1.18	2.93	3.02
19	0.62	0.65	2.27	2.31	2.77	2.61
20	0.39	0.40	1.60	1.63	2.82	2.82
21	0.38	0.38	1.43	1.44	3.01	3.00
22	0.30	0.31	1.17	1.17	3.23	3.24
23	0.32	0.35	1.96	2.06	2.64	2.64
24	0.32	0.33	1.98	2.09	2.73	2.62
25	0.29	0.31	2.48	2.60	2.35	2.39
26	0.78	0.79	2.40	2.52	2.59	2.57
27	0.32	0.35	2.57	2.76	2.28	2.33
28	0.32	0.35	1.05	1.08	3.02	3.08
29	0.26	0.26	1.07	1.07	3.33	3.33
30	0.27	0.29	2.21	2.34	2.38	2.44
31	0.31	0.33	2.10	2.19	2.45	2.46
32	0.41	0.42	1.53	1.55	3.21	3.21
33	0.42	0.42	2.14	2.16	2.69	2.67
34	0.44	0.46	1.70	1.78	2.93	2.93
35	0.37	0.37	2.83	2.84	2.37	2.36
36	0.29	0.29	1.90	1.87	2.79	2.77
37	0.29	0.33	2.60	2.71	2.36	2.38
38	0.34	0.35	1.72	1.74	2.90	2.76
39	0.25	0.27	1.63	1.69	2.59	2.56
40	0.43	0.43	2.17	2.17	2.71	2.71
41	0.29	0.31	2.49	2.59	2.37	2.39
42	0.54	0.60	2.01	2.07	2.64	2.79
43	0.19	0.21	1.18	1.26	2.88	3.01
44	0.24	0.27	1.10	1.18	3.19	3.20
45	0.29	0.31	2.53	2.58	2.47	2.38
46	0.37	0.37	2.84	2.84	2.37	2.37
47	0.34	0.34	1.79	1.80	2.93	2.93
48	0.27	0.29	2.19	2.24	2.53	2.44
49	0.41	0.42	1.93	1.93	2.68	2.68
50	0.30	0.29	1.56	1.49	3.11	3.02
51	0.25	0.28	1.64	1.73	2.42	2.53
52	0.49	0.49	1.98	1.99	2.82	2.83
53	0.27	0.30	2.22	2.36	2.44	2.43
54	0.30	0.30	1.66	1.67	2.75	2.74
55	0.37	0.39	1.78	1.92	2.62	2.58
56	0.34	0.38	3.23	3.33	2.33	2.37
57	0.33	0.36	1.40	1.48	2.80	2.83
58	0.36	0.36	2.79	2.82	2.35	2.33



1						
2						
3	0.28	0.31	1.64	1.72	2.91	2.92
4	0.51	0.51	1.77	1.77	2.99	3.00
5	0.27	0.30	1.13	1.16	2.98	3.03
6	0.30	0.31	1.38	1.47	2.89	2.88
7	0.20	0.21	0.97	1.00	2.64	2.72
8	0.21	0.21	1.00	1.01	2.45	2.50
9	0.27	0.28	1.38	1.46	2.96	2.97
10	0.35	0.36	1.87	1.97	2.58	2.49
11	0.20	0.19	0.75	0.77	2.80	2.80
12	0.29	0.31	1.82	1.92	2.77	2.79
13	0.41	0.44	2.03	2.12	2.70	2.71
14	0.34	0.36	1.42	1.58	2.73	2.77
15	0.19	0.21	1.18	1.26	2.88	3.01
16	0.27	0.28	1.38	1.45	2.96	2.97
17	0.43	0.43	2.18	2.18	2.72	2.72
18	0.22	0.22	1.35	1.35	3.15	3.14
19	0.43	0.46	1.68	1.70	3.02	2.92
20	0.28	0.31	1.54	1.60	3.01	3.01
21	0.53	0.56	1.91	2.00	2.63	2.73
22	0.42	0.39	2.23	2.21	2.62	2.53
23	0.28	0.31	1.65	1.72	2.91	2.91
24	0.22	0.25	0.97	1.05	2.98	3.12
25	0.53	0.54	1.78	1.86	2.98	2.95
26	0.35	0.37	1.52	1.54	3.17	3.18
27	0.30	0.33	1.02	1.10	2.92	3.06
28	0.31	0.33	1.49	1.54	2.95	2.96
29	0.34	0.30	1.33	1.36	2.96	2.91
30	0.43	0.47	2.07	2.16	2.62	2.64
31	0.47	0.46	1.70	1.72	2.97	2.85
32	0.44	0.44	1.61	1.61	2.95	2.95
33	0.34	0.38	1.48	1.51	3.06	3.15
34	0.39	0.40	1.57	1.65	2.80	2.77
35	0.25	0.25	1.46	1.46	2.98	2.98
36	0.40	0.46	1.63	1.69	2.81	2.93
37	0.31	0.34	2.09	2.20	2.44	2.46
38	0.22	0.22	1.34	1.36	3.13	3.09
39	0.29	0.33	2.54	2.68	2.41	2.38
40	0.34	0.37	1.43	1.45	3.06	3.13
41	0.36	0.36	2.32	2.32	2.51	2.51
42	0.47	0.47	1.71	1.74	2.84	2.86
43	0.32	0.32	2.11	2.13	2.49	2.41
44	0.33	0.36	1.37	1.45	2.82	2.85
45	0.34	0.37	1.43	1.51	2.79	2.81
46	0.26	0.29	1.13	1.22	3.16	3.18
47	0.31	0.33	0.85	0.89	3.47	3.49
48	0.44	0.44	2.36	2.37	2.66	2.66
49	0.34	0.38	1.48	1.52	3.07	3.16
50	0.31	0.31	2.47	2.47	2.49	2.49
51	0.34	0.34	1.97	1.98	2.78	2.77
52	0.34	0.35	1.74	1.70	2.86	2.75
53	0.29	0.30	2.56	2.69	2.39	2.44
54	0.66	0.66	2.05	2.05	3.06	3.06
55	0.42	0.42	1.58	1.59	3.24	3.24
56	0.30	0.31	1.40	1.47	2.84	2.82
57	0.36	0.35	1.36	1.37	3.01	2.98
58	0.23	0.22	1.19	1.26	3.01	3.04

1						
2						
3	0.38	0.38	1.37	1.37	3.20	3.20
4	0.27	0.28	2.18	2.27	2.48	2.50
5	0.40	0.40	1.97	1.97	2.61	2.61
6	0.26	0.27	1.93	2.04	2.47	2.54
7	0.34	0.34	1.99	1.99	2.82	2.82
8	0.44	0.44	1.58	1.62	3.29	3.30
9	0.35	0.36	3.60	3.74	2.56	2.56
10	0.23	0.24	1.45	1.51	3.08	3.07
11	0.53	0.62	1.91	1.98	2.66	2.80
12	0.29	0.30	2.57	2.69	2.39	2.44
13	0.52	0.52	2.25	2.25	2.66	2.66
14	0.32	0.32	1.48	1.42	3.15	3.08
15	0.28	0.31	1.81	1.90	2.79	2.80
16	0.30	0.30	1.28	1.28	3.18	3.18
17	0.68	0.74	2.35	2.45	2.46	2.53
18	0.34	0.34	1.22	1.23	3.09	3.09
19	0.38	0.37	1.43	1.43	2.89	2.90
20	0.35	0.36	1.43	1.55	2.84	2.78
21	0.26	0.29	1.25	1.34	3.13	3.12
22	0.27	0.30	1.77	1.87	2.56	2.62
23	0.35	0.35	1.73	1.73	2.92	2.92
24	0.33	0.33	2.71	2.72	2.43	2.41
25	0.41	0.41	1.47	1.48	3.20	3.20
26	0.68	0.74	2.35	2.40	2.53	2.59
27	0.25	0.25	1.55	1.61	3.00	3.08
28	0.36	0.36	1.52	1.53	2.82	2.82
29	0.29	0.30	1.05	1.01	3.22	3.19
30	0.36	0.36	2.36	2.39	2.39	2.37
31	0.32	0.32	1.57	1.58	2.89	2.89
32	0.32	0.35	1.26	1.31	3.22	3.20
33	0.27	0.29	2.21	2.33	2.43	2.45
34	0.34	0.34	2.03	2.03	2.80	2.80
35	0.33	0.36	1.36	1.38	2.92	2.98
36	0.65	0.71	2.01	2.06	2.64	2.74
37	0.44	0.44	2.37	2.37	2.67	2.67
38	0.37	0.40	2.20	2.28	2.53	2.60
39	0.39	0.43	2.02	2.09	2.72	2.70
40	0.29	0.32	1.79	1.91	2.62	2.63
41	0.37	0.37	2.82	2.83	2.40	2.40
42	0.39	0.40	1.37	1.54	2.82	2.92
43	0.25	0.27	2.07	2.15	2.53	2.55
44	0.35	0.36	1.58	1.61	2.97	2.96
45	0.31	0.30	2.39	2.46	2.43	2.39
46	0.30	0.30	1.35	1.35	3.09	3.09
47	0.25	0.28	1.64	1.73	2.43	2.53
48	0.44	0.45	1.61	1.62	2.84	2.84
49	0.31	0.33	1.48	1.54	2.95	2.96
50	0.30	0.34	1.72	1.83	2.59	2.61
51	0.27	0.30	2.21	2.34	2.48	2.44
52	0.37	0.40	2.20	2.28	2.54	2.60
53	0.43	0.43	2.16	2.17	2.71	2.70
54	0.27	0.29	2.21	2.33	2.42	2.45
55	0.21	0.22	0.49	0.51	4.08	4.30
56	0.32	0.34	1.01	1.08	3.06	3.20
57	0.40	0.40	1.61	1.62	2.83	2.83
58	0.31	0.32	1.04	1.05	3.14	3.12

1						
2						
3	0.55	0.55	1.41	1.41	3.19	3.20
4	0.33	0.33	2.51	2.51	2.41	2.40
5	0.39	0.40	2.22	2.27	2.57	2.59
6	0.28	0.30	1.80	1.80	2.89	2.85
7	0.29	0.32	1.43	1.52	2.94	2.99
8	0.29	0.31	1.80	1.90	2.77	2.79
9	0.31	0.31	1.04	1.02	3.18	3.13
10	0.29	0.32	1.10	1.16	3.00	3.05
11	0.18	0.20	1.00	1.06	2.37	2.57
12	0.47	0.45	1.62	1.60	3.00	2.92
13	0.66	0.69	2.32	2.34	2.77	2.59
14	0.29	0.30	1.09	1.27	2.94	3.08
15	0.34	0.35	1.25	1.29	3.14	3.12
16	0.25	0.28	1.64	1.73	2.43	2.53
17	0.32	0.34	1.34	1.41	2.87	2.88
18	0.29	0.29	1.45	1.47	2.95	2.93
19	0.26	0.28	1.28	1.34	2.72	2.78
20	0.38	0.38	3.69	3.72	2.64	2.60
21	0.26	0.27	2.07	2.14	2.55	2.55
22	0.30	0.33	2.60	2.71	2.35	2.38
23	0.43	0.43	2.33	2.36	2.63	2.61
24	0.34	0.37	1.43	1.52	2.78	2.81
25	0.32	0.32	1.56	1.59	2.88	2.87
26	0.42	0.42	1.55	1.56	3.23	3.23
27	0.73	0.76	2.37	2.50	2.42	2.51
28	0.74	0.76	2.36	2.56	2.43	2.52
29	0.58	0.63	2.16	2.20	2.69	2.70
30	0.44	0.44	2.36	2.36	2.65	2.65
31	0.39	0.42	1.91	1.99	2.82	2.82
32	0.31	0.33	0.84	0.89	3.46	3.49
33	0.28	0.28	1.90	1.91	2.72	2.72
34	0.30	0.30	1.65	1.65	2.78	2.78
35	0.34	0.38	1.50	1.54	3.07	3.16
36	0.32	0.34	1.37	1.42	2.89	2.78
37	0.37	0.40	1.51	1.55	3.01	3.17
38	0.41	0.41	2.29	2.37	2.53	2.54
39	0.31	0.33	1.50	1.54	2.94	2.95
40	0.33	0.33	1.16	1.18	3.12	3.12
41	0.50	0.55	1.84	1.89	2.97	2.90
42	0.21	0.21	0.97	0.98	2.71	2.71
43	0.36	0.40	1.98	2.09	2.62	2.68
44	0.23	0.23	1.04	1.04	2.80	2.80
45	0.29	0.32	1.82	1.98	2.65	2.70
46	0.29	0.32	1.11	1.16	3.00	3.05
47	0.29	0.29	2.25	2.25	2.57	2.57
48	0.25	0.27	2.07	2.15	2.54	2.55
49	0.30	0.31	1.03	1.05	3.27	3.25
50	0.82	0.82	2.39	2.40	2.83	2.83
51	0.33	0.33	2.73	2.73	2.44	2.44
52	0.37	0.37	2.80	2.83	2.36	2.34
53	0.29	0.31	1.76	1.88	2.76	2.77
54	0.47	0.47	2.21	2.21	2.71	2.71
55	0.42	0.42	2.14	2.16	2.68	2.66
56	0.34	0.38	1.47	1.50	3.06	3.14
57	0.31	0.33	0.84	0.89	3.46	3.49
58	0.35	0.36	1.30	1.38	2.99	2.96

1						
2						
3	0.24	0.27	1.75	1.86	2.67	2.71
4	0.37	0.38	1.37	1.34	3.13	3.02
5	0.44	0.42	2.14	2.08	2.79	2.68
6	0.29	0.30	2.27	2.43	2.33	2.42
7	0.16	0.18	1.04	1.05	2.50	2.56
8	0.31	0.30	2.41	2.45	2.45	2.41
9	0.35	0.39	1.33	1.39	2.90	3.07
10	0.17	0.19	1.03	1.05	2.49	2.58
11	0.25	0.27	1.11	1.17	3.20	3.21
12	0.33	0.33	2.73	2.73	2.44	2.44
13	0.29	0.30	2.50	2.52	2.42	2.35
14	0.34	0.37	1.40	1.42	2.86	2.89
15	0.29	0.32	1.44	1.51	3.01	2.98
16	0.29	0.31	2.48	2.60	2.34	2.39
17	0.33	0.33	2.72	2.73	2.43	2.43
18	0.26	0.26	1.76	1.78	2.83	2.71
19	0.35	0.35	1.31	1.31	3.12	3.12
20	0.21	0.21	1.02	1.03	2.59	2.59
21	0.31	0.31	1.31	1.31	3.20	3.20
22	0.36	0.36	2.79	2.81	2.39	2.37
23	0.44	0.49	1.31	1.37	2.95	3.11
24	0.23	0.24	1.46	1.51	3.07	3.08
25	0.34	0.35	1.42	1.40	3.20	3.09
26	0.26	0.27	1.93	2.04	2.50	2.55
27	0.79	0.85	2.38	2.40	2.62	2.61
28	0.30	0.31	1.38	1.48	2.88	2.88
29	0.64	0.64	1.92	1.92	2.92	2.92
30	0.29	0.31	2.48	2.60	2.34	2.39
31	0.41	0.41	1.47	1.48	3.20	3.20
32	0.34	0.38	3.21	3.35	2.32	2.38
33	0.27	0.30	2.21	2.35	2.46	2.43
34	0.35	0.38	1.27	1.32	2.98	2.98
35	0.37	0.38	1.45	1.48	2.99	2.98
36	0.32	0.35	3.47	3.60	2.48	2.56
37	0.30	0.31	1.41	1.50	2.79	2.81
38	0.32	0.32	1.42	1.42	3.14	3.14
39	0.25	0.27	2.07	2.16	2.53	2.55
40	0.32	0.34	1.41	1.43	3.13	3.12
41	0.41	0.41	3.45	3.48	2.42	2.39
42	0.38	0.38	1.43	1.44	3.01	3.01
43	0.27	0.29	2.21	2.34	2.41	2.45
44	0.24	0.27	1.10	1.18	3.20	3.20
45	0.34	0.38	1.44	1.46	3.06	3.13
46	0.47	0.50	1.26	1.32	3.18	3.18
47	0.19	0.21	0.46	0.49	4.07	4.20
48	0.30	0.32	1.39	1.46	3.00	3.01
49	0.21	0.22	1.27	1.39	2.99	2.95
50	0.44	0.44	2.36	2.37	2.66	2.66
51	0.45	0.46	2.11	2.14	2.69	2.65
52	0.38	0.38	3.70	3.73	2.64	2.60
53	0.41	0.41	1.43	1.43	3.16	3.16
54	0.80	0.80	2.43	2.45	2.64	2.65
55	0.36	0.36	2.29	2.29	2.47	2.47
56	0.77	0.83	2.34	2.48	2.75	2.71
57	0.28	0.31	1.80	1.90	2.78	2.80
58	0.34	0.34	2.00	2.01	2.81	2.81

1						
2						
3	0.27	0.29	2.21	2.34	2.40	2.44
4	0.31	0.33	2.02	2.17	2.50	2.50
5	0.68	0.74	2.34	2.38	2.56	2.60
6	0.34	0.34	1.98	1.98	2.79	2.79
7	0.37	0.38	1.42	1.45	3.02	2.99
8	0.64	0.72	2.22	2.29	2.71	2.75
9	0.30	0.32	1.48	1.50	3.00	2.98
10	0.36	0.40	1.90	1.97	2.81	2.78
11	0.61	0.62	1.99	2.06	3.03	3.02
12	0.36	0.36	2.41	2.41	2.40	2.40
13	0.36	0.38	1.75	1.89	2.53	2.61
14	0.35	0.36	1.52	1.54	2.81	2.81
15	0.31	0.31	1.46	1.46	3.06	3.06
16	0.31	0.32	1.48	1.63	2.80	2.75
17	0.30	0.33	2.60	2.71	2.35	2.38
18	0.58	0.64	2.18	2.23	2.58	2.69
19	0.15	0.18	0.51	0.50	2.61	2.63
20	0.42	0.44	2.05	2.12	2.72	2.71
21	0.54	0.54	1.81	1.84	3.01	3.02
22	0.29	0.31	1.81	1.84	2.86	2.79
23	0.36	0.36	1.60	1.62	2.97	2.97
24	0.37	0.37	1.95	1.95	2.63	2.62
25	0.16	0.18	1.01	1.02	2.42	2.50
26	0.32	0.32	1.56	1.59	2.88	2.87
27	0.24	0.26	1.14	1.18	3.16	3.17
28	0.44	0.44	2.36	2.36	2.65	2.65
29	0.36	0.36	1.62	1.62	2.98	2.98
30	0.78	0.78	2.43	2.47	2.69	2.70
31	0.30	0.32	1.38	1.46	2.99	3.01
32	0.35	0.36	3.25	3.25	2.37	2.33
33	0.28	0.31	1.61	1.67	2.95	2.95
34	0.34	0.34	1.31	1.31	3.08	3.08
35	0.34	0.34	1.66	1.67	2.88	2.86
36	0.30	0.33	2.58	2.72	2.31	2.36
37	0.26	0.28	1.40	1.48	2.74	2.78
38	0.16	0.19	1.01	1.02	2.42	2.51
39	0.36	0.40	2.20	2.29	2.51	2.59
40	0.28	0.31	1.81	1.91	2.77	2.79
41	0.43	0.48	1.69	1.75	2.82	2.92
42	0.49	0.56	1.80	1.85	2.67	2.79
43	0.25	0.26	1.72	1.81	2.80	2.74
44	0.49	0.49	1.99	1.99	2.83	2.83
45	0.37	0.41	1.33	1.38	3.04	3.03
46	0.37	0.41	1.44	1.52	2.92	2.88
47	0.30	0.33	1.74	1.82	2.61	2.61
48	0.32	0.33	1.97	1.98	2.68	2.67
49	0.44	0.44	2.14	2.21	2.62	2.63
50	0.31	0.31	1.49	1.51	2.93	2.92
51	0.42	0.42	1.57	1.59	3.24	3.24
52	0.30	0.32	1.86	2.01	2.69	2.67
53	0.37	0.40	2.20	2.28	2.53	2.60
54	0.53	0.57	1.88	1.99	2.61	2.72
55	0.43	0.43	1.51	1.51	3.07	3.07
56	0.30	0.32	1.38	1.46	2.99	3.01
57	0.28	0.30	1.80	1.80	2.89	2.85
58	0.34	0.38	1.41	1.42	3.03	3.10

1						
2						
3	0.33	0.33	2.50	2.51	2.41	2.40
4	0.24	0.27	1.10	1.18	3.19	3.20
5	0.35	0.36	1.52	1.54	2.81	2.80
6	0.31	0.32	1.11	1.19	2.93	2.98
7	0.30	0.30	1.10	1.07	3.17	3.11
8	0.37	0.37	2.83	2.83	2.40	2.40
9	0.24	0.25	1.41	1.47	2.70	2.75
10	0.29	0.29	1.88	1.84	2.80	2.78
11	0.29	0.31	2.47	2.62	2.27	2.36
12	0.33	0.33	2.72	2.73	2.44	2.43
13	0.31	0.31	2.65	2.62	2.43	2.35
14	0.28	0.28	1.90	1.91	2.72	2.71
15	0.43	0.43	1.42	1.42	3.00	3.00
16	0.39	0.40	1.55	1.66	2.76	2.72
17	0.31	0.31	1.42	1.42	3.11	3.11
18	0.32	0.32	1.57	1.58	2.89	2.88
19	0.30	0.32	1.79	1.94	2.63	2.65
20	0.24	0.27	1.10	1.18	3.19	3.20
21	0.38	0.38	3.71	3.73	2.64	2.61
22	0.23	0.23	0.52	0.52	4.34	4.34
23	0.58	0.58	1.81	1.83	3.08	3.08
24	0.30	0.32	1.38	1.46	2.99	3.01
25	0.34	0.37	1.43	1.44	3.07	3.13
26	0.15	0.18	1.02	1.02	2.43	2.48
27	0.61	0.61	2.01	2.01	2.78	2.78
28	0.43	0.43	1.59	1.65	3.15	3.13
29	0.38	0.38	1.53	1.55	2.82	2.81
30	0.33	0.34	1.99	2.00	2.81	2.81
31	0.33	0.35	1.27	1.38	2.89	2.96
32	0.26	0.27	1.93	2.03	2.51	2.55
33	0.33	0.34	1.64	1.66	2.86	2.82
34	0.34	0.34	1.72	1.73	2.92	2.91
35	0.78	0.79	2.40	2.51	2.60	2.59
36	0.76	0.78	2.41	2.51	2.66	2.64
37	0.42	0.39	2.22	2.21	2.62	2.53
38	0.34	0.34	1.98	1.99	2.82	2.81
39	0.42	0.43	1.99	2.05	2.72	2.69
40	0.33	0.34	1.64	1.66	2.87	2.83
41	0.66	0.66	2.04	2.06	3.04	3.05
42	0.58	0.62	2.14	2.17	2.80	2.72
43	0.69	0.70	2.25	2.36	2.75	2.73
44	0.33	0.33	1.40	1.40	2.97	2.97
45	0.38	0.38	3.74	3.75	2.63	2.63
46	0.28	0.30	1.89	1.90	2.86	2.80
47	0.37	0.37	1.39	1.46	3.02	2.95
48	0.29	0.32	0.99	1.03	3.21	3.29
49	0.42	0.42	1.53	1.54	3.22	3.22
50	0.34	0.38	1.43	1.45	3.05	3.13
51	0.35	0.36	2.75	2.80	2.37	2.33
52	0.52	0.52	2.25	2.25	2.66	2.66
53	0.29	0.31	2.49	2.58	2.38	2.39
54	0.33	0.33	2.69	2.71	2.41	2.40
55	0.29	0.32	1.42	1.55	2.89	2.89
56	0.36	0.36	1.60	1.62	2.97	2.97
57	0.19	0.21	0.46	0.49	4.07	4.20
58	0.37	0.37	1.34	1.31	3.02	2.96

1						
2						
3	0.49	0.49	1.75	1.75	2.97	2.97
4	0.26	0.29	1.24	1.33	3.12	3.11
5	0.29	0.31	2.48	2.61	2.33	2.39
6	0.32	0.35	3.47	3.59	2.48	2.56
7	0.22	0.22	1.34	1.36	3.13	3.09
8	0.42	0.42	1.61	1.62	3.25	3.25
9	0.37	0.40	2.20	2.28	2.53	2.60
10	0.32	0.32	2.10	2.12	2.48	2.41
11	0.34	0.34	1.66	1.67	2.88	2.88
12	0.33	0.34	2.06	2.23	2.40	2.46
13	0.39	0.39	1.93	1.97	2.67	2.65
14	0.36	0.37	1.33	1.31	3.05	2.97
15	0.29	0.31	1.91	1.97	2.77	2.76
16	0.38	0.38	3.74	3.74	2.63	2.63
17	0.29	0.30	2.57	2.67	2.42	2.44
18	0.40	0.45	2.01	2.13	2.61	2.68
19	0.29	0.33	2.55	2.66	2.43	2.39
20	0.36	0.40	1.99	2.08	2.69	2.70
21	0.31	0.32	2.53	2.70	2.27	2.37
22	0.37	0.37	1.67	1.65	2.90	2.80
23	0.27	0.29	2.21	2.34	2.40	2.44
24	0.28	0.28	1.91	1.91	2.73	2.72
25	0.38	0.38	3.72	3.74	2.64	2.62
26	0.33	0.37	1.36	1.36	2.95	3.01
27	0.36	0.36	2.81	2.82	2.40	2.39
28	0.27	0.29	1.29	1.41	2.92	2.95
29	0.29	0.30	2.49	2.54	2.43	2.36
30	0.27	0.29	2.21	2.34	2.41	2.45
31	0.32	0.35	3.47	3.61	2.48	2.56
32	0.27	0.27	1.16	1.16	3.09	3.00
33	0.50	0.53	1.84	1.88	3.01	2.92
34	0.37	0.39	1.47	1.63	3.03	3.12
35	0.32	0.32	1.35	1.35	3.16	3.16
36	0.32	0.33	1.95	2.03	2.76	2.68
37	0.31	0.31	2.44	2.46	2.47	2.45
38	0.38	0.41	1.59	1.65	3.08	3.05
39	0.30	0.33	2.12	2.24	2.46	2.43
40	0.37	0.37	2.83	2.84	2.37	2.36
41	0.25	0.27	2.07	2.16	2.52	2.55
42	0.41	0.41	1.43	1.44	3.16	3.16
43	0.45	0.45	1.62	1.62	2.85	2.85
44	0.28	0.29	1.90	1.86	2.86	2.75
45	0.33	0.33	1.89	1.90	2.87	2.87
46	0.55	0.58	1.90	2.09	2.75	2.89
47	0.30	0.34	2.58	2.72	2.28	2.34
48	0.35	0.38	1.69	1.89	2.61	2.61
49	0.35	0.38	1.35	1.33	2.93	2.99
50	0.32	0.32	1.57	1.58	2.89	2.89
51	0.41	0.42	1.93	1.93	2.68	2.68
52	0.35	0.35	1.33	1.33	3.04	3.04
53	0.25	0.25	1.55	1.61	3.01	3.07
54	0.35	0.38	1.38	1.37	2.98	3.04
55	0.40	0.40	1.99	1.99	2.69	2.69
56	0.42	0.42	1.57	1.58	3.24	3.24
57	0.39	0.43	1.47	1.66	3.04	3.15
58	0.30	0.30	1.26	1.28	3.20	3.19

1						
2						
3	0.25	0.27	2.07	2.16	2.53	2.55
4	0.21	0.21	1.02	1.02	2.60	2.60
5	0.30	0.31	1.52	1.50	3.05	2.95
6	0.34	0.34	1.60	1.61	2.83	2.83
7	0.36	0.37	1.50	1.58	2.84	2.80
8	0.44	0.44	2.14	2.20	2.63	2.62
9	0.43	0.46	1.70	1.79	2.92	2.93
10	0.32	0.32	1.57	1.58	2.89	2.89
11	0.34	0.35	2.21	2.39	2.34	2.41
12	0.61	0.61	2.01	2.01	2.78	2.78
13	0.28	0.31	1.71	1.83	2.70	2.76
14	0.29	0.29	2.15	2.15	2.60	2.60
15	0.41	0.42	1.93	1.93	2.68	2.68
16	0.34	0.34	2.01	2.02	2.80	2.80
17	0.51	0.51	1.78	1.78	3.00	3.00
18	0.31	0.33	1.50	1.54	2.94	2.96
19	0.34	0.34	1.99	2.01	2.81	2.80
20	0.34	0.34	2.00	2.01	2.81	2.81
21	0.41	0.44	2.04	2.12	2.71	2.71
22	0.40	0.40	1.36	1.37	3.07	3.06
23	0.38	0.40	1.36	1.38	3.03	3.01
24	0.28	0.28	1.91	1.91	2.73	2.72
25	0.20	0.21	0.94	1.00	2.77	2.91
26	0.48	0.46	1.64	1.62	3.02	2.90
27	0.32	0.32	1.43	1.43	3.12	3.12
28	0.25	0.26	1.73	1.82	2.61	2.67
29	0.35	0.36	1.76	1.82	2.85	2.83
30	0.36	0.36	2.39	2.40	2.40	2.39
31	0.44	0.44	1.59	1.60	3.31	3.32
32	0.33	0.33	2.50	2.51	2.41	2.40
33	0.54	0.54	1.77	1.80	2.95	2.94
34	0.31	0.33	1.46	1.54	2.94	2.96
35	0.34	0.34	1.20	1.20	3.24	3.24
36	0.29	0.30	1.36	1.41	3.03	2.98
37	0.61	0.61	2.00	2.00	2.77	2.77
38	0.36	0.35	2.26	2.30	2.49	2.46
39	0.49	0.49	1.99	1.99	2.83	2.83
40	0.29	0.27	2.07	2.07	2.54	2.49
41	0.47	0.47	1.83	1.84	2.90	2.89
42	0.28	0.31	1.62	1.74	2.76	2.83
43	0.36	0.36	2.32	2.32	2.50	2.50
44	0.77	0.78	2.39	2.54	2.57	2.54
45	0.29	0.33	1.46	1.50	2.84	2.83
46	0.32	0.33	2.10	2.15	2.55	2.46
47	0.64	0.73	2.18	2.27	2.64	2.73
48	0.35	0.37	1.44	1.52	2.70	2.74
49	0.27	0.30	2.22	2.36	2.44	2.43
50	0.40	0.40	1.35	1.39	3.07	3.03
51	0.33	0.36	1.37	1.36	2.98	3.02
52	0.31	0.33	2.02	2.17	2.51	2.51
53	0.33	0.33	2.71	2.72	2.43	2.42
54	0.29	0.32	1.43	1.52	2.94	2.98
55	0.32	0.33	1.91	2.00	2.77	2.71
56	0.36	0.36	2.78	2.82	2.35	2.32
57	0.32	0.32	2.61	2.74	2.31	2.36
58	0.29	0.29	2.15	2.15	2.61	2.61



1						
2						
3	0.28	0.29	1.90	1.88	2.88	2.77
4	0.59	0.58	1.91	1.92	2.72	2.73
5	0.34	0.34	1.79	1.80	2.93	2.93
6	0.42	0.42	1.35	1.37	3.10	3.09
7	0.54	0.58	1.86	1.94	2.67	2.73
8	0.30	0.31	1.38	1.48	2.88	2.88
9	0.31	0.32	1.89	2.01	2.74	2.68
10	0.52	0.52	2.24	2.24	2.65	2.65
11	0.33	0.32	2.45	2.50	2.39	2.36
12	0.22	0.22	1.35	1.35	3.14	3.14
13	0.33	0.35	3.47	3.58	2.47	2.55
14	0.44	0.44	2.37	2.37	2.67	2.67
15	0.32	0.31	1.71	1.72	2.88	2.77
16	0.39	0.34	1.31	1.37	2.92	2.85
17	0.29	0.31	2.49	2.59	2.37	2.39
18	0.20	0.21	1.02	1.04	2.54	2.55
19	0.29	0.29	2.24	2.25	2.57	2.56
20	0.22	0.23	1.02	1.04	2.77	2.77
21	0.37	0.37	1.50	1.51	3.12	3.05
22	0.24	0.23	1.14	1.16	2.99	2.98
23	0.21	0.22	1.00	1.06	2.67	2.81
24	0.35	0.35	1.55	1.60	2.96	2.94
25	0.23	0.22	1.19	1.26	3.02	3.04
26	0.33	0.33	2.72	2.73	2.43	2.43
27	0.31	0.33	2.02	2.17	2.51	2.51
28	0.64	0.71	1.99	2.06	2.71	2.82
29	0.33	0.34	1.16	1.24	3.03	3.00
30	0.44	0.45	1.43	1.44	3.03	3.03
31	0.34	0.37	1.43	1.51	2.79	2.81
32	0.40	0.40	2.21	2.25	2.63	2.58
33	0.36	0.36	1.53	1.53	2.83	2.83
34	0.66	0.66	2.05	2.05	3.05	3.06
35	0.32	0.35	3.47	3.61	2.48	2.56
36	0.32	0.35	1.96	2.06	2.63	2.64
37	0.29	0.33	2.54	2.69	2.39	2.38
38	0.44	0.49	1.30	1.35	2.97	3.13
39	0.37	0.37	1.52	1.49	3.17	3.08
40	0.30	0.33	2.02	2.15	2.53	2.51
41	0.33	0.34	1.63	1.66	2.98	2.97
42	0.23	0.25	1.46	1.52	3.06	3.08
43	0.42	0.39	2.22	2.21	2.61	2.53
44	0.28	0.28	1.90	1.85	2.84	2.74
45	0.29	0.30	2.49	2.53	2.43	2.35
46	0.33	0.33	2.73	2.73	2.44	2.44
47	0.33	0.34	1.78	1.79	2.92	2.92
48	0.40	0.41	1.94	1.98	2.86	2.81
49	0.27	0.27	2.06	2.12	2.59	2.55
50	0.28	0.28	1.90	1.85	2.80	2.76
51	0.33	0.33	2.50	2.51	2.41	2.40
52	0.67	0.68	2.30	2.34	2.74	2.58
53	0.39	0.39	2.16	2.16	2.65	2.65
54	0.33	0.33	2.68	2.71	2.41	2.39
55	0.33	0.34	1.99	2.01	2.80	2.79
56	0.37	0.37	2.82	2.83	2.40	2.40
57	0.29	0.31	1.21	1.30	3.09	3.13
58	0.31	0.33	2.10	2.19	2.46	2.46

1						
2						
3	0.33	0.34	1.47	1.51	3.01	2.99
4	0.52	0.57	1.88	1.99	2.61	2.72
5	0.36	0.36	1.53	1.53	2.82	2.82
6	0.28	0.28	1.89	1.84	2.80	2.77
7	0.23	0.23	1.02	1.07	3.51	3.44
8	0.26	0.27	1.94	2.01	2.56	2.56
9	0.33	0.34	1.66	1.72	2.88	2.82
10	0.55	0.55	1.41	1.41	3.19	3.20
11	0.33	0.32	2.64	2.72	2.37	2.34
12	0.68	0.74	2.35	2.40	2.53	2.59
13	0.35	0.33	1.98	1.97	2.67	2.63
14	0.33	0.33	2.73	2.73	2.44	2.44
15	0.43	0.43	2.17	2.18	2.72	2.72
16	0.28	0.31	1.64	1.72	2.91	2.92
17	0.28	0.27	2.19	2.20	2.44	2.42
18	0.37	0.40	2.20	2.28	2.54	2.60
19	0.30	0.32	2.08	2.17	2.49	2.42
20	0.28	0.31	1.66	1.72	2.91	2.91
21	0.31	0.31	2.47	2.47	2.48	2.48
22	0.27	0.29	1.08	1.20	2.90	3.02
23	0.31	0.31	2.64	2.61	2.41	2.34
24	0.34	0.34	1.80	1.80	2.93	2.93
25	0.33	0.33	2.02	2.08	2.75	2.67
26	0.29	0.32	1.81	1.97	2.65	2.70
27	0.53	0.57	1.97	2.00	2.88	2.79
28	0.39	0.40	1.85	1.92	2.64	2.60
29	0.33	0.33	2.48	2.50	2.40	2.38
30	0.29	0.29	2.25	2.25	2.57	2.57
31	0.32	0.32	1.57	1.58	2.89	2.88
32	0.35	0.38	2.64	2.76	2.79	2.82
33	0.27	0.28	1.86	2.00	2.62	2.71
34	0.35	0.37	1.76	1.87	2.60	2.64
35	0.42	0.42	1.47	1.47	3.19	3.19
36	0.32	0.31	1.75	1.76	2.81	2.78
37	0.40	0.40	1.98	1.99	2.68	2.68
38	0.23	0.24	1.46	1.52	3.06	3.08
39	0.33	0.34	1.36	1.46	2.78	2.80
40	0.64	0.72	2.22	2.29	2.72	2.75
41	0.42	0.46	1.65	1.67	2.91	2.88
42	0.29	0.32	1.53	1.63	2.92	2.92
43	0.36	0.36	1.89	1.97	2.60	2.53
44	0.58	0.58	2.20	2.20	2.66	2.66
45	0.34	0.34	1.20	1.20	3.24	3.24
46	0.30	0.30	1.07	1.06	3.26	3.14
47	0.34	0.38	1.50	1.53	3.10	3.16
48	0.34	0.34	2.00	2.00	2.73	2.62
49	0.26	0.28	2.10	2.22	2.43	2.51
50	0.54	0.55	1.82	1.84	3.02	3.02
51	0.14	0.16	1.00	1.00	2.49	2.44
52	0.30	0.30	1.50	1.48	3.01	2.97
53	0.31	0.32	1.51	1.66	2.75	2.73
54	0.43	0.43	1.45	1.45	3.24	3.25
55	0.52	0.55	1.38	1.49	3.19	3.20
56	0.37	0.37	2.82	2.83	2.36	2.35
57	0.28	0.29	1.95	1.91	2.81	2.74
58	0.41	0.44	2.03	2.12	2.70	2.71

1						
2						
3	0.35	0.35	1.31	1.34	3.01	3.00
4	0.41	0.41	1.48	1.50	3.20	3.20
5	0.47	0.47	2.21	2.21	2.72	2.71
6	0.27	0.28	2.21	2.24	2.51	2.42
7	0.36	0.36	2.76	2.81	2.35	2.31
8	0.25	0.26	1.74	1.78	2.73	2.65
9	0.43	0.44	1.57	1.62	3.29	3.29
10	0.35	0.35	1.57	1.57	2.96	2.96
11	0.34	0.35	1.23	1.27	3.14	3.12
12	0.28	0.28	1.22	1.26	3.17	3.17
13	0.37	0.37	1.95	1.95	2.63	2.62
14	0.25	0.28	1.05	1.10	3.01	3.11
15	0.58	0.58	1.89	1.93	2.71	2.73
16	0.27	0.29	1.65	1.76	2.35	2.43
17	0.36	0.37	1.38	1.47	3.02	2.93
18	0.19	0.21	0.90	0.94	2.76	2.84
19	0.33	0.32	2.63	2.73	2.34	2.35
20	0.31	0.31	1.60	1.62	2.95	2.92
21	0.37	0.37	1.55	1.55	2.88	2.88
22	0.18	0.20	0.49	0.52	2.45	2.69
23	0.69	0.70	2.26	2.36	2.75	2.74
24	0.44	0.44	1.58	1.61	3.30	3.31
25	0.30	0.33	2.02	2.14	2.55	2.52
26	0.30	0.33	2.60	2.71	2.36	2.38
27	0.34	0.34	1.66	1.67	2.88	2.86
28	0.47	0.50	1.76	1.81	3.13	2.97
29	0.35	0.38	1.52	1.57	3.08	3.17
30	0.48	0.49	1.98	1.98	2.82	2.82
31	0.49	0.49	1.84	1.85	2.94	2.95
32	0.54	0.55	1.40	1.41	3.28	3.29
33	0.34	0.38	1.47	1.50	3.07	3.14
34	0.27	0.29	2.21	2.34	2.40	2.44
35	0.73	0.82	2.28	2.52	2.63	2.66
36	0.29	0.32	1.46	1.51	3.01	2.98
37	0.40	0.40	1.98	1.99	2.68	2.68
38	0.26	0.27	1.93	2.04	2.50	2.55
39	0.53	0.59	1.41	1.55	3.19	3.18
40	0.33	0.33	2.51	2.52	2.41	2.41
41	0.29	0.32	2.54	2.63	2.46	2.40
42	0.34	0.38	3.20	3.35	2.32	2.38
43	0.34	0.36	1.08	1.12	3.03	3.09
44	0.13	0.15	0.60	0.62	2.85	2.74
45	0.37	0.37	2.83	2.83	2.40	2.40
46	0.27	0.30	2.21	2.35	2.46	2.43
47	0.34	0.34	1.99	1.99	2.82	2.82
48	0.37	0.38	1.47	1.45	2.97	2.89
49	0.33	0.33	1.96	2.02	2.77	2.71
50	0.70	0.71	2.28	2.32	2.79	2.79
51	0.55	0.55	1.83	1.83	3.03	3.03
52	0.42	0.42	3.48	3.49	2.43	2.42
53	0.31	0.31	1.72	1.74	2.91	2.79
54	0.68	0.72	2.33	2.36	2.67	2.62
55	0.27	0.29	2.21	2.32	2.43	2.45
56	0.65	0.73	2.23	2.31	2.68	2.75
57	0.50	0.50	1.73	1.76	3.05	3.04
58	0.25	0.28	1.23	1.31	3.05	3.05

1						
2						
3	0.42	0.42	1.35	1.38	3.10	3.09
4	0.28	0.28	1.91	1.92	2.73	2.73
5	0.26	0.28	1.25	1.33	3.04	3.04
6	0.68	0.74	2.35	2.39	2.56	2.60
7	0.28	0.28	1.92	1.92	2.73	2.73
8	0.35	0.38	2.64	2.76	2.79	2.82
9	0.31	0.31	1.35	1.38	2.93	2.86
10	0.18	0.20	0.77	0.80	2.81	2.86
11	0.33	0.35	2.07	2.24	2.40	2.46
12	0.21	0.21	0.85	0.85	2.95	2.95
13	0.29	0.32	1.00	1.05	3.18	3.25
14	0.26	0.27	1.93	2.04	2.50	2.55
15	0.37	0.37	1.95	1.95	2.63	2.62
16	0.28	0.29	1.89	1.86	2.89	2.77
17	0.43	0.44	2.08	2.11	2.77	2.70
18	0.36	0.40	1.51	1.54	3.03	3.16
19	0.36	0.40	1.31	1.36	3.00	3.00
20	0.42	0.42	1.58	1.59	3.24	3.24
21	0.27	0.29	1.24	1.35	2.98	3.03
22	0.31	0.31	1.61	1.62	2.96	2.95
23	0.41	0.41	1.43	1.44	3.16	3.16
24	0.66	0.66	2.05	2.05	3.06	3.06
25	0.38	0.38	3.73	3.74	2.64	2.63
26	0.68	0.74	2.35	2.39	2.55	2.60
27	0.43	0.49	1.70	1.77	2.81	2.92
28	0.34	0.38	3.20	3.35	2.32	2.38
29	0.31	0.31	2.44	2.46	2.47	2.45
30	0.26	0.27	1.97	1.96	2.63	2.52
31	0.32	0.35	3.46	3.61	2.46	2.55
32	0.43	0.46	1.70	1.79	2.92	2.93
33	0.37	0.38	3.69	3.72	2.64	2.59
34	0.28	0.32	1.45	1.52	3.06	3.06
35	0.25	0.26	1.73	1.79	2.70	2.69
36	0.31	0.34	1.34	1.37	2.90	2.96
37	0.66	0.66	2.04	2.06	3.05	3.05
38	0.34	0.38	3.20	3.35	2.32	2.38
39	0.31	0.31	1.46	1.46	3.06	3.06
40	0.29	0.31	1.21	1.31	3.08	3.12
41	0.70	0.71	2.29	2.31	2.79	2.80
42	0.39	0.39	1.94	1.97	2.67	2.66
43	0.30	0.31	1.38	1.48	2.87	2.88
44	0.43	0.47	2.08	2.16	2.62	2.64
45	0.39	0.43	2.01	2.10	2.70	2.70
46	0.34	0.34	1.99	1.99	2.79	2.79
47	0.43	0.47	2.09	2.16	2.63	2.64
48	0.36	0.41	2.19	2.30	2.45	2.57
49	0.31	0.33	1.47	1.54	2.95	2.96
50	0.29	0.30	2.49	2.55	2.44	2.37
51	0.28	0.29	1.88	1.86	2.88	2.78
52	0.31	0.33	1.47	1.54	2.95	2.96
53	0.38	0.38	1.43	1.44	3.01	3.01
54	0.44	0.48	1.60	1.71	2.80	2.90
55	0.39	0.39	2.17	2.17	2.65	2.65
56	0.44	0.44	1.59	1.61	3.31	3.32
57	0.36	0.38	1.75	1.88	2.56	2.62
58	0.32	0.35	3.47	3.59	2.48	2.56

1						
2						
3	0.32	0.32	2.81	2.81	2.48	2.48
4	0.14	0.16	0.99	1.00	2.45	2.41
5	0.64	0.70	2.30	2.35	2.65	2.65
6	0.36	0.36	2.29	2.29	2.47	2.47
7	0.44	0.44	2.07	2.08	2.77	2.77
8	0.29	0.29	2.15	2.15	2.61	2.60
9	0.33	0.35	2.05	2.12	2.58	2.57
10	0.32	0.34	1.31	1.38	2.83	2.88
11	0.31	0.33	1.34	1.35	2.95	2.98
12	0.23	0.25	1.45	1.53	3.05	3.08
13	0.39	0.39	1.92	1.97	2.66	2.64
14	0.24	0.27	1.11	1.20	3.16	3.17
15	0.50	0.56	1.88	1.94	2.77	2.91
16	0.41	0.42	1.36	1.43	2.96	2.93
17	0.34	0.34	2.00	2.00	2.82	2.82
18	0.36	0.36	2.39	2.40	2.40	2.39
19	0.38	0.38	3.73	3.74	2.64	2.63
20	0.29	0.32	1.11	1.15	3.05	3.14
21	0.41	0.39	2.20	2.20	2.58	2.53
22	0.28	0.29	1.07	1.15	3.27	3.42
23	0.31	0.30	2.41	2.45	2.45	2.41
24	0.31	0.31	1.82	1.83	2.64	2.63
25	0.28	0.28	2.19	2.24	2.52	2.49
26	0.26	0.28	1.23	1.31	3.15	3.13
27	0.37	0.37	2.82	2.82	2.40	2.40
28	0.36	0.36	2.78	2.81	2.39	2.37
29	0.63	0.72	2.18	2.26	2.68	2.73
30	0.31	0.30	2.38	2.47	2.41	2.39
31	0.29	0.32	1.00	1.05	3.18	3.25
32	0.36	0.35	3.45	3.49	2.51	2.50
33	0.26	0.27	1.59	1.59	3.11	3.10
34	0.27	0.29	2.21	2.32	2.43	2.45
35	0.35	0.35	1.25	1.25	3.16	3.16
36	0.42	0.42	2.33	2.36	2.62	2.60
37	0.39	0.43	2.03	2.09	2.72	2.70
38	0.34	0.37	1.45	1.45	3.11	3.14
39	0.41	0.41	1.92	1.93	2.67	2.67
40	0.21	0.22	0.44	0.44	2.57	2.58
41	0.24	0.27	1.12	1.19	3.18	3.18
42	0.14	0.16	0.99	1.00	2.43	2.39
43	0.36	0.36	2.77	2.82	2.35	2.31
44	0.28	0.31	1.81	1.91	2.77	2.79
45	0.33	0.34	1.39	1.42	2.87	2.78
46	0.28	0.31	1.64	1.72	2.90	2.92
47	0.43	0.43	1.48	1.49	3.27	3.27
48	0.34	0.38	1.50	1.54	3.07	3.16
49	0.33	0.35	1.08	1.11	3.08	3.14
50	0.20	0.21	1.01	1.04	2.51	2.59
51	0.40	0.41	2.28	2.39	2.50	2.55
52	0.37	0.37	2.82	2.82	2.40	2.40
53	0.56	0.58	1.87	1.93	2.69	2.73
54	0.64	0.71	2.31	2.38	2.58	2.64
55	0.28	0.28	1.91	1.91	2.73	2.72
56	0.76	0.79	2.34	2.38	2.76	2.60
57	0.38	0.38	2.22	2.23	2.58	2.58
58	0.42	0.42	1.58	1.59	3.24	3.25

1						
2						
3	0.34	0.34	2.00	2.01	2.81	2.81
4	0.33	0.33	1.78	1.79	2.91	2.91
5	0.58	0.58	2.19	2.20	2.66	2.66
6	0.70	0.78	2.26	2.40	2.57	2.64
7	0.32	0.32	2.10	2.12	2.48	2.41
8	0.34	0.37	1.43	1.52	2.78	2.81
9	0.27	0.29	1.65	1.78	2.37	2.43
10	0.32	0.31	1.34	1.37	2.91	2.87
11	0.29	0.31	1.76	1.88	2.76	2.77
12	0.29	0.30	1.67	1.66	3.00	2.95
13	0.34	0.38	1.67	1.79	2.71	2.70
14	0.63	0.71	1.99	2.05	2.71	2.82
15	0.24	0.27	1.11	1.20	3.17	3.17
16	0.35	0.38	1.67	1.86	2.62	2.61
17	0.82	0.82	2.39	2.41	2.82	2.83
18	0.28	0.28	1.91	1.91	2.73	2.72
19	0.44	0.44	1.40	1.44	3.09	3.08
20	0.25	0.26	1.73	1.80	2.67	2.69
21	0.38	0.40	2.20	2.27	2.55	2.59
22	0.34	0.35	2.65	2.84	2.30	2.35
23	0.45	0.45	1.44	1.44	3.03	3.03
24	0.47	0.47	2.21	2.21	2.71	2.71
25	0.82	0.82	2.39	2.40	2.83	2.83
26	0.30	0.30	1.50	1.47	3.05	2.97
27	0.30	0.32	1.68	1.81	2.70	2.80
28	0.20	0.21	0.96	0.99	2.64	2.72
29	0.41	0.42	1.93	1.93	2.68	2.68
30	0.43	0.43	2.36	2.36	2.65	2.65
31	0.33	0.32	2.64	2.72	2.36	2.34
32	0.30	0.31	1.52	1.50	3.05	2.95
33	0.31	0.34	1.03	1.14	2.78	2.96
34	0.28	0.31	1.60	1.67	2.94	2.95
35	0.26	0.29	2.18	2.27	2.53	2.44
36	0.22	0.25	1.06	1.14	3.23	3.23
37	0.29	0.29	2.15	2.15	2.60	2.60
38	0.34	0.34	1.09	1.10	3.31	3.31
39	0.37	0.37	2.82	2.83	2.40	2.40
40	0.35	0.36	1.44	1.42	3.21	3.16
41	0.31	0.31	1.82	1.83	2.64	2.63
42	0.29	0.30	2.56	2.69	2.36	2.43
43	0.30	0.32	0.94	0.99	3.21	3.31
44	0.32	0.34	1.38	1.42	2.87	2.78
45	0.40	0.40	2.21	2.23	2.64	2.55
46	0.34	0.34	1.80	1.80	2.93	2.93
47	0.34	0.34	2.07	2.07	2.77	2.77
48	0.27	0.28	1.19	1.24	3.14	3.14
49	0.34	0.37	3.24	3.32	2.33	2.37
50	0.32	0.35	1.42	1.50	2.67	2.72
51	0.37	0.40	1.46	1.53	2.99	2.97
52	0.78	0.79	2.40	2.51	2.60	2.58
53	0.41	0.41	1.47	1.47	3.20	3.20
54	0.42	0.42	1.57	1.59	3.24	3.23
55	0.27	0.29	2.21	2.34	2.41	2.45
56	0.21	0.21	1.02	1.02	2.60	2.60
57	0.24	0.27	1.10	1.18	3.19	3.20
58	0.31	0.31	1.35	1.41	3.01	2.90

1						
2						
3	0.60	0.60	1.99	2.00	2.77	2.76
4	0.41	0.42	1.93	1.93	2.68	2.68
5	0.27	0.30	2.22	2.36	2.44	2.43
6	0.40	0.40	2.20	2.23	2.65	2.56
7	0.31	0.31	2.47	2.47	2.48	2.48
8	0.64	0.66	2.12	2.30	2.78	2.75
9	0.33	0.33	1.10	1.10	3.27	3.27
10	0.37	0.37	1.69	1.71	2.87	2.87
11	0.68	0.73	2.34	2.38	2.58	2.60
12	0.16	0.19	1.01	1.02	2.41	2.50
13	0.65	0.71	2.32	2.38	2.57	2.64
14	0.29	0.31	1.88	1.97	2.75	2.76
15	0.34	0.35	1.72	1.72	2.89	2.75
16	0.27	0.27	1.35	1.42	2.98	2.99
17	0.43	0.48	2.07	2.16	2.61	2.64
18	0.33	0.34	1.38	1.42	2.87	2.78
19	0.28	0.31	1.80	1.89	2.78	2.80
20	0.34	0.34	1.73	1.75	2.94	2.94
21	0.34	0.35	1.73	1.71	2.87	2.75
22	0.39	0.40	1.60	1.63	2.82	2.81
23	0.48	0.49	1.28	1.29	3.23	3.15
24	0.31	0.31	2.65	2.62	2.43	2.35
25	0.26	0.29	1.10	1.17	3.03	3.16
26	0.28	0.31	1.81	1.89	2.79	2.80
27	0.36	0.36	1.62	1.63	2.98	2.98
28	0.30	0.30	2.35	2.49	2.36	2.43
29	0.40	0.44	1.83	1.91	2.84	2.83
30	0.43	0.47	2.08	2.16	2.62	2.64
31	0.29	0.32	2.54	2.64	2.46	2.40
32	0.39	0.39	2.05	2.03	2.78	2.67
33	0.29	0.33	2.54	2.68	2.40	2.38
34	0.44	0.45	1.44	1.44	3.03	3.03
35	0.28	0.29	1.88	1.85	2.87	2.76
36	0.31	0.30	1.35	1.39	2.96	2.87
37	0.50	0.54	2.05	2.12	2.60	2.63
38	0.30	0.33	2.58	2.71	2.53	2.61
39	0.38	0.38	3.72	3.74	2.64	2.62
40	0.48	0.50	2.15	2.22	2.60	2.58
41	0.30	0.31	1.03	1.07	3.15	3.19
42	0.35	0.35	1.57	1.57	2.96	2.96
43	0.37	0.37	1.43	1.39	3.10	3.05
44	0.37	0.36	3.27	3.23	2.38	2.32
45	0.27	0.29	2.21	2.35	2.34	2.42
46	0.30	0.31	1.38	1.48	2.88	2.88
47	0.30	0.31	1.42	1.53	2.79	2.80
48	0.28	0.31	1.81	1.91	2.77	2.79
49	0.43	0.43	2.36	2.36	2.65	2.65
50	0.22	0.25	1.45	1.53	3.04	3.08
51	0.32	0.32	1.57	1.58	2.89	2.89
52	0.24	0.27	1.74	1.86	2.68	2.72
53	0.34	0.38	1.68	1.80	2.77	2.72
54	0.34	0.34	1.72	1.73	2.92	2.91
55	0.27	0.29	2.21	2.34	2.41	2.45
56	0.31	0.32	2.00	2.03	2.59	2.49
57	0.35	0.34	1.71	1.69	2.78	2.76
58	0.36	0.36	2.41	2.41	2.40	2.40

1						
2						
3	0.27	0.27	1.11	1.10	3.16	3.05
4	0.34	0.34	1.98	1.98	2.79	2.79
5	0.35	0.38	1.51	1.56	3.02	3.14
6	0.32	0.34	1.33	1.42	2.86	2.89
7	0.43	0.43	1.41	1.41	2.99	2.99
8	0.30	0.31	2.62	2.64	2.42	2.36
9	0.34	0.37	3.24	3.31	2.34	2.37
10	0.38	0.39	2.75	2.89	2.72	2.80
11	0.37	0.37	2.83	2.83	2.40	2.40
12	0.37	0.37	1.55	1.55	2.88	2.88
13	0.32	0.33	1.14	1.23	3.15	3.15
14	0.27	0.29	1.66	1.83	2.38	2.42
15	0.40	0.40	1.61	1.62	2.83	2.83
16	0.31	0.31	1.35	1.38	2.93	2.86
17	0.33	0.34	1.23	1.33	2.87	2.95
18	0.44	0.45	1.60	1.62	2.84	2.84
19	0.34	0.34	1.65	1.67	2.87	2.85
20	0.37	0.40	2.20	2.28	2.54	2.60
21	0.43	0.44	2.12	2.23	2.57	2.66
22	0.32	0.32	2.81	2.81	2.49	2.49
23	0.32	0.35	3.47	3.60	2.48	2.56
24	0.30	0.30	1.65	1.65	2.78	2.78
25	0.34	0.34	1.99	1.99	2.82	2.82
26	0.29	0.31	2.50	2.56	2.42	2.39
27	0.28	0.28	1.73	1.68	2.87	2.88
28	0.29	0.32	1.43	1.55	2.89	2.89
29	0.59	0.60	1.85	1.87	2.93	2.93
30	0.27	0.29	2.21	2.33	2.42	2.45
31	0.34	0.34	0.95	0.96	3.37	3.38
32	0.34	0.37	1.43	1.44	3.07	3.13
33	0.34	0.34	1.97	1.98	2.79	2.78
34	0.27	0.30	2.22	2.36	2.44	2.43
35	0.25	0.26	1.13	1.17	3.18	3.16
36	0.34	0.34	2.00	2.00	2.81	2.81
37	0.44	0.44	1.59	1.60	3.31	3.32
38	0.37	0.37	2.82	2.83	2.36	2.35
39	0.32	0.32	1.42	1.42	3.11	3.11
40	0.19	0.21	1.18	1.26	2.87	3.01
41	0.38	0.38	1.48	1.48	3.13	3.13
42	0.33	0.33	2.66	2.71	2.39	2.36
43	0.43	0.43	2.35	2.36	2.65	2.65
44	0.33	0.33	1.29	1.28	3.32	3.21
45	0.21	0.21	0.85	0.85	2.95	2.95
46	0.38	0.38	3.74	3.75	2.63	2.63
47	0.31	0.31	1.79	1.85	2.61	2.55
48	0.34	0.34	1.53	1.53	3.03	3.04
49	0.29	0.31	2.62	2.65	2.43	2.37
50	0.34	0.35	1.54	1.54	3.04	3.04
51	0.31	0.31	2.72	2.79	2.40	2.39
52	0.20	0.21	0.82	0.87	2.81	2.93
53	0.36	0.37	2.82	2.82	2.40	2.39
54	0.26	0.27	1.93	2.04	2.50	2.55
55	0.31	0.32	0.86	0.91	3.45	3.46
56	0.27	0.30	2.22	2.36	2.44	2.43
57	0.29	0.31	1.72	1.85	2.70	2.76
58	0.44	0.44	2.36	2.36	2.65	2.65



1						
2						
3	0.27	0.29	2.21	2.33	2.42	2.45
4	0.34	0.34	1.99	1.99	2.82	2.82
5	0.41	0.41	1.93	1.93	2.67	2.67
6	0.51	0.56	1.48	1.52	2.99	3.13
7	0.28	0.28	2.20	2.24	2.54	2.50
8	0.30	0.31	1.40	1.49	2.78	2.82
9	0.34	0.37	1.43	1.51	2.80	2.81
10	0.29	0.31	1.76	1.87	2.77	2.78
11	0.41	0.41	1.90	1.93	2.66	2.64
12	0.29	0.31	1.63	1.77	2.76	2.84
13	0.30	0.34	1.71	1.83	2.58	2.60
14	0.42	0.42	2.32	2.35	2.60	2.58
15	0.26	0.27	1.93	2.03	2.52	2.56
16	0.44	0.44	2.37	2.37	2.67	2.67
17	0.30	0.33	2.60	2.71	2.36	2.38
18	0.28	0.31	1.81	1.89	2.79	2.80
19	0.21	0.22	1.26	1.39	2.98	2.95
20	0.25	0.27	2.07	2.16	2.52	2.55
21	0.30	0.33	0.73	0.76	3.68	3.78
22	0.38	0.38	1.43	1.44	3.01	3.01
23	0.55	0.58	1.87	1.94	2.69	2.73
24	0.34	0.38	1.68	1.80	2.77	2.72
25	0.78	0.78	2.44	2.46	2.70	2.70
26	0.32	0.33	1.68	1.73	2.92	2.89
27	0.32	0.34	1.36	1.46	2.99	3.06
28	0.31	0.33	1.42	1.43	2.87	2.77
29	0.63	0.69	2.28	2.33	2.72	2.66
30	0.81	0.82	2.38	2.42	2.81	2.82
31	0.30	0.34	1.72	1.83	2.59	2.61
32	0.65	0.74	2.23	2.31	2.66	2.75
33	0.47	0.51	1.25	1.33	3.18	3.18
34	0.35	0.36	0.78	0.80	3.85	3.86
35	0.32	0.36	1.38	1.43	2.84	2.89
36	0.14	0.18	0.54	0.54	2.67	2.68
37	0.33	0.33	2.68	2.71	2.41	2.38
38	0.60	0.60	1.98	1.99	2.76	2.75
39	0.29	0.31	2.49	2.57	2.42	2.39
40	0.44	0.44	1.59	1.61	3.31	3.32
41	0.52	0.54	2.11	2.17	2.60	2.58
42	0.28	0.31	1.81	1.91	2.77	2.79
43	0.50	0.54	2.05	2.12	2.61	2.63
44	0.24	0.26	1.28	1.34	2.85	2.88
45	0.31	0.31	2.47	2.47	2.48	2.48
46	0.20	0.21	0.96	0.99	2.65	2.73
47	0.42	0.43	1.40	1.47	3.04	3.01
48	0.35	0.37	1.76	1.87	2.59	2.64
49	0.30	0.33	2.60	2.71	2.35	2.38
50	0.65	0.73	2.23	2.31	2.67	2.75
51	0.32	0.35	3.47	3.60	2.48	2.56
52	0.37	0.37	2.84	2.84	2.37	2.37
53	0.36	0.40	1.63	1.75	2.81	2.76
54	0.37	0.40	1.51	1.55	3.02	3.16
55	0.35	0.36	1.43	1.48	3.08	3.06
56	0.37	0.37	2.83	2.84	2.36	2.36
57	0.37	0.40	2.20	2.28	2.53	2.60
58	0.35	0.36	2.26	2.27	2.45	2.44

1						
2						
3	0.32	0.34	2.14	2.29	2.34	2.38
4	0.28	0.28	1.92	1.92	2.73	2.73
5	0.32	0.32	1.58	1.58	2.90	2.89
6	0.51	0.59	1.89	1.97	2.73	2.89
7	0.52	0.57	1.91	1.92	2.90	2.80
8	0.18	0.20	0.77	0.81	2.81	2.87
9	0.33	0.33	1.58	1.59	2.85	2.85
10	0.31	0.31	2.46	2.46	2.48	2.47
11	0.59	0.58	1.90	1.92	2.72	2.73
12	0.32	0.32	2.60	2.75	2.30	2.37
13	0.23	0.23	0.99	0.97	3.38	3.35
14	0.32	0.33	1.33	1.36	2.96	2.95
15	0.44	0.44	1.61	1.61	2.94	2.94
16	0.26	0.28	2.16	2.28	2.46	2.53
17	0.28	0.28	1.89	1.84	2.80	2.77
18	0.35	0.39	1.33	1.39	2.93	3.09
19	0.28	0.31	1.66	1.72	2.91	2.91
20	0.29	0.32	0.99	1.04	3.14	3.23
21	0.34	0.35	2.72	2.81	2.35	2.32
22	0.27	0.27	1.52	1.53	2.89	2.87
23	0.43	0.43	2.33	2.36	2.63	2.61
24	0.36	0.36	2.39	2.40	2.40	2.39
25	0.34	0.38	1.43	1.45	3.05	3.13
26	0.43	0.49	1.70	1.75	2.84	2.92
27	0.29	0.30	2.57	2.68	2.40	2.44
28	0.35	0.35	2.74	2.80	2.37	2.32
29	0.82	0.82	2.39	2.40	2.83	2.83
30	0.31	0.32	1.87	1.99	2.75	2.69
31	0.35	0.35	1.14	1.14	3.11	3.11
32	0.34	0.34	2.06	2.08	2.77	2.75
33	0.32	0.33	2.11	2.16	2.53	2.46
34	0.31	0.34	2.09	2.19	2.45	2.46
35	0.31	0.31	2.47	2.47	2.49	2.49
36	0.29	0.30	2.49	2.54	2.43	2.36
37	0.29	0.32	2.54	2.63	2.47	2.40
38	0.23	0.23	0.51	0.51	4.26	4.31
39	0.27	0.28	1.43	1.52	2.70	2.75
40	0.31	0.34	2.09	2.19	2.44	2.46
41	0.35	0.35	1.59	1.59	3.07	3.07
42	0.36	0.39	1.48	1.63	2.67	2.72
43	0.29	0.32	1.43	1.55	2.89	2.89
44	0.25	0.28	1.65	1.71	2.47	2.53
45	0.80	0.80	2.43	2.45	2.64	2.64
46	0.30	0.32	1.17	1.22	2.99	3.07
47	0.52	0.58	1.85	1.94	2.62	2.70
48	0.30	0.32	1.25	1.37	2.92	2.99
49	0.65	0.73	2.22	2.30	2.70	2.75
50	0.61	0.61	2.00	2.00	2.78	2.78
51	0.28	0.28	1.92	1.92	2.73	2.73
52	0.20	0.20	0.95	0.98	2.59	2.64
53	0.28	0.31	1.82	1.90	2.78	2.79
54	0.31	0.31	2.46	2.47	2.48	2.48
55	0.38	0.38	3.74	3.74	2.63	2.63
56	0.26	0.25	1.79	1.76	2.72	2.65
57	0.34	0.34	2.03	2.03	2.80	2.80
58	0.34	0.38	3.21	3.34	2.32	2.38

1						
2						
3	0.31	0.34	1.64	1.77	2.79	2.87
4	0.29	0.31	1.83	1.93	2.76	2.78
5	0.29	0.31	2.62	2.64	2.42	2.36
6	0.36	0.36	2.28	2.31	2.49	2.48
7	0.29	0.32	1.53	1.63	2.92	2.92
8	0.29	0.31	1.87	1.97	2.74	2.75
9	0.48	0.48	1.80	1.82	2.91	2.92
10	0.47	0.55	1.77	1.83	2.69	2.81
11	0.34	0.34	1.66	1.67	2.88	2.87
12	0.35	0.35	1.13	1.15	3.11	3.11
13	0.28	0.31	1.61	1.67	2.95	2.95
14	0.32	0.34	1.73	1.87	2.49	2.49
15	0.26	0.29	1.26	1.36	3.07	3.07
16	0.29	0.31	1.55	1.63	2.93	2.92
17	0.31	0.35	1.38	1.46	2.75	2.79
18	0.80	0.80	2.43	2.45	2.64	2.65
19	0.27	0.29	2.21	2.35	2.34	2.42
20	0.33	0.33	1.92	1.98	2.76	2.69
21	0.34	0.37	1.71	1.79	2.79	2.72
22	0.36	0.36	2.41	2.41	2.40	2.40
23	0.31	0.32	1.50	1.65	2.74	2.73
24	0.38	0.38	3.74	3.74	2.63	2.63
25	0.34	0.35	2.11	2.29	2.43	2.50
26	0.37	0.37	1.47	1.49	3.11	3.10
27	0.28	0.29	1.90	1.85	2.82	2.76
28	0.35	0.35	1.59	1.59	3.06	3.06
29	0.38	0.38	3.74	3.74	2.63	2.63
30	0.37	0.38	1.42	1.39	3.22	3.10
31	0.21	0.21	0.84	0.85	2.94	2.94
32	0.31	0.30	2.38	2.47	2.41	2.39
33	0.55	0.55	1.79	1.79	2.96	2.96
34	0.27	0.27	2.05	2.12	2.59	2.54
35	0.38	0.38	2.12	2.14	2.62	2.60
36	0.31	0.33	0.84	0.89	3.46	3.49
37	0.36	0.36	2.32	2.32	2.51	2.51
38	0.27	0.29	2.21	2.34	2.41	2.45
39	0.22	0.23	0.96	0.99	3.45	3.38
40	0.36	0.36	2.84	2.84	2.69	2.68
41	0.35	0.37	1.44	1.51	2.71	2.76
42	0.25	0.27	2.07	2.16	2.53	2.55
43	0.67	0.68	2.30	2.34	2.73	2.59
44	0.13	0.14	0.58	0.62	2.55	2.55
45	0.18	0.21	0.67	0.69	2.77	2.83
46	0.31	0.31	2.44	2.46	2.47	2.45
47	0.34	0.38	1.42	1.42	3.04	3.10
48	0.20	0.21	0.96	0.99	2.65	2.73
49	0.30	0.31	1.38	1.48	2.87	2.88
50	0.44	0.44	1.59	1.60	3.31	3.32
51	0.29	0.31	1.04	1.03	3.28	3.22
52	0.29	0.31	1.74	1.79	2.83	2.80
53	0.34	0.35	2.70	2.83	2.32	2.33
54	0.35	0.38	1.76	1.87	2.59	2.64
55	0.42	0.42	1.62	1.62	3.26	3.26
56	0.29	0.32	1.79	1.92	2.60	2.62
57	0.47	0.55	1.77	1.83	2.69	2.81
58	0.39	0.41	1.62	1.62	3.01	2.91

1						
2						
3	0.26	0.26	1.57	1.59	3.09	3.08
4	0.65	0.69	1.97	2.12	2.82	2.79
5	0.31	0.31	1.01	1.02	3.09	2.95
6	0.54	0.54	1.79	1.86	2.99	2.98
7	0.22	0.22	1.35	1.36	3.14	3.13
8	0.27	0.29	2.20	2.29	2.49	2.46
9	0.37	0.39	1.50	1.67	3.03	3.14
10	0.26	0.27	1.93	2.04	2.50	2.55
11	0.29	0.31	1.75	1.87	2.76	2.78
12	0.24	0.24	1.44	1.48	3.09	3.03
13	0.34	0.34	1.08	1.08	3.38	3.38
14	0.35	0.36	1.49	1.50	3.27	3.16
15	0.29	0.30	2.56	2.61	2.50	2.41
16	0.32	0.33	1.72	1.78	2.82	2.76
17	0.60	0.60	2.01	2.01	3.13	3.13
18	0.28	0.30	1.87	1.88	2.85	2.80
19	0.31	0.31	2.47	2.47	2.48	2.48
20	0.33	0.33	1.98	2.01	2.80	2.77
21	0.29	0.31	1.80	1.91	2.64	2.70
22	0.36	0.36	2.41	2.41	2.40	2.40
23	0.34	0.37	1.43	1.52	2.78	2.81
24	0.47	0.49	2.15	2.22	2.59	2.58
25	0.29	0.31	1.82	1.85	2.84	2.79
26	0.39	0.40	1.84	1.92	2.64	2.59
27	0.27	0.28	1.79	1.81	2.75	2.63
28	0.37	0.37	2.84	2.84	2.37	2.37
29	0.28	0.31	1.56	1.66	2.57	2.62
30	0.36	0.37	1.42	1.47	3.08	3.06
31	0.26	0.27	2.08	2.14	2.55	2.55
32	0.34	0.38	1.67	1.80	2.74	2.71
33	0.34	0.34	2.00	2.00	2.82	2.82
34	0.44	0.44	1.87	1.87	2.71	2.71
35	0.29	0.28	2.08	2.13	2.55	2.52
36	0.37	0.40	2.20	2.28	2.53	2.60
37	0.16	0.18	1.02	1.02	2.43	2.51
38	0.25	0.27	2.07	2.16	2.52	2.55
39	0.37	0.40	1.49	1.53	3.00	2.96
40	0.28	0.31	1.87	1.92	2.79	2.78
41	0.35	0.35	0.94	0.94	3.52	3.53
42	0.21	0.21	0.93	0.96	2.69	2.69
43	0.28	0.31	1.84	1.92	2.78	2.79
44	0.44	0.49	1.70	1.76	2.77	2.90
45	0.51	0.58	1.88	1.96	2.75	2.89
46	0.41	0.41	1.92	1.93	2.67	2.67
47	0.65	0.73	2.23	2.30	2.68	2.75
48	0.28	0.31	1.64	1.72	2.90	2.92
49	0.36	0.36	2.30	2.30	2.47	2.47
50	0.55	0.58	1.87	1.94	2.69	2.73
51	0.33	0.36	3.48	3.67	2.46	2.53
52	0.46	0.47	1.32	1.33	3.15	3.07
53	0.30	0.31	1.38	1.48	2.87	2.88
54	0.49	0.49	1.99	1.99	2.83	2.83
55	0.41	0.41	1.44	1.45	3.00	2.93
56	0.34	0.34	1.79	1.80	2.93	2.93
57	0.28	0.28	1.90	1.91	2.72	2.71
58	0.34	0.34	1.98	1.98	2.79	2.79
59						
60						

1						
2						
3	0.32	0.32	2.81	2.81	2.48	2.48
4	0.34	0.34	2.00	2.00	2.81	2.81
5	0.33	0.36	3.49	3.68	2.47	2.54
6	0.27	0.30	2.22	2.37	2.44	2.43
7	0.27	0.29	2.21	2.34	2.40	2.45
8	0.65	0.74	2.23	2.31	2.67	2.75
9	0.27	0.29	2.21	2.34	2.40	2.44
10	0.31	0.33	1.47	1.54	2.95	2.96
11	0.36	0.36	1.35	1.33	2.96	2.93
12	0.29	0.32	1.47	1.50	2.84	2.83
13	0.29	0.33	1.47	1.50	2.84	2.83
14	0.27	0.27	1.36	1.37	3.11	3.09
15	0.29	0.31	1.60	1.69	2.87	2.86
16	0.64	0.74	2.19	2.28	2.62	2.72
17	0.50	0.55	1.88	1.93	2.80	2.91
18	0.34	0.36	1.72	1.75	2.88	2.75
19	0.31	0.34	1.34	1.38	2.89	2.95
20	0.67	0.73	2.35	2.41	2.45	2.52
21	0.19	0.21	1.18	1.27	2.82	2.96
22	0.38	0.40	2.20	2.27	2.55	2.59
23	0.34	0.34	2.06	2.08	2.77	2.75
24	0.13	0.15	0.57	0.60	2.80	2.73
25	0.28	0.28	1.90	1.85	2.84	2.74
26	0.30	0.31	1.05	1.09	3.17	3.14
27	0.44	0.44	1.59	1.61	3.31	3.32
28	0.42	0.44	2.05	2.12	2.72	2.71
29	0.41	0.41	1.41	1.45	3.15	3.12
30	0.32	0.35	3.47	3.61	2.48	2.56
31	0.29	0.29	1.56	1.57	2.83	2.83
32	0.43	0.42	2.12	2.08	2.78	2.68
33	0.31	0.32	2.09	2.14	2.48	2.41
34	0.44	0.44	1.41	1.44	3.02	3.00
35	0.32	0.35	1.36	1.42	3.08	3.11
36	0.24	0.26	1.74	1.84	2.72	2.73
37	0.81	0.82	2.38	2.41	2.82	2.82
38	0.36	0.36	1.34	1.36	3.04	3.04
39	0.31	0.31	1.36	1.42	3.00	2.90
40	0.26	0.29	2.18	2.27	2.53	2.44
41	0.30	0.32	1.14	1.19	3.01	3.08
42	0.30	0.31	1.07	1.06	3.25	3.15
43	0.25	0.29	1.09	1.16	2.97	3.09
44	0.30	0.31	1.38	1.48	2.87	2.88
45	0.29	0.29	2.25	2.25	2.57	2.57
46	0.33	0.33	1.98	2.02	2.79	2.74
47	0.15	0.18	0.64	0.64	2.77	2.82
48	0.33	0.35	2.64	2.82	2.29	2.37
49	0.34	0.38	1.50	1.54	3.07	3.16
50	0.28	0.31	1.83	1.89	2.79	2.80
51	0.41	0.41	1.92	1.93	2.67	2.67
52	0.25	0.26	1.11	1.15	3.21	3.17
53	0.21	0.21	0.84	0.85	2.92	2.92
54	0.30	0.32	1.10	1.16	3.01	3.10
55	0.79	0.79	1.76	1.76	3.30	3.30
56	0.31	0.31	1.37	1.38	3.05	3.05
57	0.37	0.37	2.82	2.82	2.40	2.40
58	0.40	0.40	2.21	2.25	2.61	2.59

1						
2						
3	0.26	0.27	1.80	1.93	2.56	2.68
4	0.79	0.85	2.38	2.39	2.65	2.61
5	0.27	0.30	2.21	2.35	2.46	2.43
6	0.36	0.36	2.28	2.31	2.49	2.48
7	0.31	0.32	1.91	2.03	2.74	2.66
8	0.36	0.38	1.48	1.57	3.00	3.08
9	0.40	0.45	2.01	2.14	2.60	2.67
10	0.36	0.36	1.27	1.27	2.94	2.95
11	0.36	0.36	2.31	2.32	2.50	2.50
12	0.39	0.40	3.34	3.46	2.37	2.34
13	0.33	0.33	1.40	1.40	2.97	2.97
14	0.20	0.21	0.96	0.99	2.65	2.73
15	0.29	0.33	2.54	2.68	2.40	2.38
16	0.26	0.27	1.93	2.04	2.50	2.55
17	0.27	0.27	1.64	1.68	2.90	2.85
18	0.28	0.31	1.62	1.72	2.76	2.83
19	0.28	0.28	1.91	1.92	2.73	2.73
20	0.34	0.38	3.20	3.35	2.32	2.38
21	0.29	0.31	2.48	2.60	2.34	2.39
22	0.32	0.33	1.39	1.43	2.99	2.97
23	0.42	0.45	1.68	1.69	3.01	2.90
24	0.30	0.30	2.49	2.48	2.38	2.33
25	0.31	0.33	1.47	1.54	2.95	2.96
26	0.33	0.32	1.40	1.45	3.00	2.87
27	0.59	0.65	2.18	2.24	2.57	2.69
28	0.34	0.34	2.01	2.02	2.80	2.80
29	0.29	0.31	2.48	2.60	2.34	2.39
30	0.29	0.33	2.54	2.69	2.38	2.37
31	0.28	0.31	1.60	1.67	2.94	2.95
32	0.23	0.24	1.46	1.52	3.07	3.08
33	0.28	0.30	1.68	1.72	2.91	2.90
34	0.31	0.33	2.12	2.27	2.43	2.42
35	0.71	0.80	2.26	2.47	2.58	2.67
36	0.23	0.23	0.51	0.51	4.31	4.34
37	0.28	0.28	1.87	1.90	2.70	2.67
38	0.34	0.34	2.07	2.07	2.77	2.77
39	0.31	0.30	2.40	2.45	2.44	2.40
40	0.33	0.36	1.42	1.47	2.87	2.81
41	0.28	0.30	1.70	1.71	2.92	2.90
42	0.23	0.23	0.52	0.51	4.32	4.34
43	0.34	0.34	1.79	1.80	2.93	2.93
44	0.29	0.32	2.54	2.63	2.47	2.40
45	0.30	0.31	1.39	1.47	2.89	2.88
46	0.28	0.28	1.91	1.91	2.72	2.72
47	0.42	0.42	3.50	3.50	2.43	2.43
48	0.30	0.31	1.38	1.48	2.88	2.88
49	0.30	0.31	1.21	1.24	3.06	3.03
50	0.59	0.59	1.84	1.87	2.93	2.93
51	0.40	0.40	1.49	1.51	2.92	2.90
52	0.41	0.42	1.93	1.93	2.68	2.68
53	0.28	0.31	1.84	1.92	2.78	2.79
54	0.36	0.36	2.78	2.82	2.35	2.32
55	0.36	0.40	1.31	1.37	2.91	3.06
56	0.81	0.82	2.38	2.41	2.82	2.82
57	0.34	0.34	1.23	1.23	3.19	3.19
58	0.30	0.30	1.21	1.24	3.10	3.04

1						
2						
3	0.55	0.52	2.07	2.05	2.66	2.61
4	0.26	0.28	2.19	2.26	2.50	2.43
5	0.29	0.31	2.53	2.57	2.46	2.38
6	0.28	0.31	1.81	1.91	2.77	2.79
7	0.30	0.31	1.72	1.72	2.76	2.63
8	0.63	0.71	1.99	2.05	2.71	2.82
9	0.47	0.47	2.22	2.22	2.72	2.72
10	0.42	0.43	1.54	1.62	2.81	2.77
11	0.70	0.70	2.28	2.32	2.78	2.78
12	0.34	0.34	1.09	1.10	3.31	3.31
13	0.31	0.31	2.64	2.63	2.42	2.35
14	0.39	0.40	2.02	2.06	2.78	2.70
15	0.30	0.31	1.73	1.73	2.77	2.63
16	0.33	0.33	1.88	1.89	2.86	2.85
17	0.54	0.54	1.42	1.45	3.25	3.26
18	0.25	0.27	2.07	2.16	2.52	2.55
19	0.61	0.61	2.00	2.00	2.77	2.77
20	0.34	0.34	1.60	1.60	2.84	2.83
21	0.26	0.25	1.16	1.13	3.13	3.11
22	0.27	0.29	2.21	2.34	2.41	2.45
23	0.27	0.29	2.21	2.34	2.41	2.45
24	0.37	0.37	1.54	1.56	2.87	2.87
25	0.27	0.30	2.21	2.34	2.48	2.44
26	0.26	0.29	1.09	1.17	2.95	3.10
27	0.25	0.27	1.73	1.84	2.54	2.64
28	0.51	0.58	1.88	1.95	2.76	2.89
29	0.76	0.83	2.32	2.51	2.72	2.67
30	0.29	0.29	2.14	2.14	2.60	2.60
31	0.37	0.40	1.47	1.53	3.00	2.96
32	0.34	0.37	1.68	1.80	2.77	2.72
33	0.30	0.31	1.52	1.49	3.05	2.95
34	0.35	0.36	1.47	1.47	3.25	3.13
35	0.43	0.44	1.60	1.61	2.94	2.93
36	0.22	0.22	1.06	1.11	2.68	2.76
37	0.47	0.46	1.73	1.76	2.97	2.88
38	0.21	0.21	0.85	0.85	2.95	2.95
39	0.34	0.34	1.98	1.99	2.79	2.78
40	0.35	0.37	1.76	1.87	2.59	2.64
41	0.27	0.29	2.21	2.34	2.41	2.45
42	0.31	0.31	1.32	1.32	2.93	2.88
43	0.32	0.32	2.43	2.50	2.39	2.34
44	0.37	0.37	2.84	2.84	2.37	2.37
45	0.58	0.64	2.17	2.23	2.59	2.69
46	0.30	0.33	2.58	2.69	2.54	2.61
47	0.36	0.41	1.57	1.66	3.03	3.05
48	0.23	0.25	1.46	1.52	3.06	3.08
49	0.34	0.34	1.79	1.79	2.87	2.87
50	0.23	0.23	1.03	1.03	2.82	2.82
51	0.52	0.57	1.85	1.96	2.59	2.68
52	0.36	0.38	1.37	1.45	2.97	3.04
53	0.29	0.31	2.48	2.60	2.34	2.39
54	0.29	0.31	1.59	1.69	2.86	2.86
55	0.40	0.44	1.85	1.90	2.85	2.83
56	0.33	0.33	1.97	1.98	2.69	2.69
57	0.34	0.37	1.68	1.80	2.78	2.72
58	0.38	0.38	3.73	3.74	2.64	2.63
59	0.38	0.38	3.73	3.74	2.64	2.63
60	0.31	0.33	1.00	1.10	3.12	3.26

1						
2						
3	0.78	0.78	2.43	2.47	2.69	2.70
4	0.33	0.33	1.71	1.74	2.94	2.92
5	0.32	0.33	1.00	1.09	3.21	3.30
6	0.40	0.41	2.28	2.39	2.50	2.55
7	0.34	0.38	1.49	1.53	3.07	3.15
8	0.36	0.36	1.62	1.63	2.98	2.98
9						

10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

For peer review only



## STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation
<b>Title and abstract</b>	1	Air pollutants and development of interstitial lung disease in patients with connective tissue disease: a population-based case-control study in Taiwan Structured abstract on page 3-4
<b>Introduction</b>		
Background/rationale	2	Page 6-7
Objectives	3	Page 6, line 103-108
<b>Methods</b>		
Study design	4	Page 8, line 114-115
Setting	5	Page 8-9, line 117-132
Participants	6	Page 9-10, case group line 145-148, control line 149-152
Variables	7	Page 10-12, line 164-192
Data sources/ measurement	8*	Page 8-9, line 116-132
Bias	9	Page 10-12, line 163-192
Study size	10	Page 9, line 134-139
Quantitative variables	11	Page 10, line 153-162
Statistical methods	12	Page 12, line 193-205
<b>Results</b>		
Participants	13*	Page 14, line 213-216
Descriptive data	14*	Page 14, line 216-225 (table 1)
Outcome data	15*	Page 14-15, line 225-234
Main results	16	Page 15-16, line 235-258
Other analyses	17	N/A
<b>Discussion</b>		
Key results	18	Page 17, line 260-267
Limitations	19	Page 20-21, line 329-350
Interpretation	20	Page 17-20, line 268-328
Generalisability	21	Page 20-21, line 329-340
<b>Other information</b>		
Funding	22	Page 22, line 357-361

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at [www.strobe-statement.org](http://www.strobe-statement.org).