```
ONEWAY ShootperExplant BY PGRs
  /STATISTICS DESCRIPTIVES HOMOGENEITY
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).
```

# Oneway

**Notes**

| | | |
|---|---|---|
| Output Created | | 30-MAY-2016 00:19:59 |
| Comments | | |
| Input | Data | F:\4thApril_2wayAnova\Multiplication_rawFile_4thapril.sav |
| | Active Dataset | DataSet1 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 27 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| | Cases Used | Statistics for each analysis are based on cases with no missing data for any variable in the analysis. |
| Syntax | | ONEWAY ShootperExplant BY PGRs<br>/STATISTICS DESCRIPTIVES HOMOGENEITY<br>/MISSING ANALYSIS.. |
| Resources | Processor Time | 00:00:00.03 |
| | Elapsed Time | 00:00:00.42 |

[DataSet1] F:\4thApril_2wayAnova\Multiplication_rawFile_4thapril.sav

**Descriptives**

ShootperExplant

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 0.4BA | 4 | 10.6000 | 1.14310 | .57155 | 8.7811 | 12.4189 |
| 0.6BA | 4 | 9.8500 | 1.07548 | .53774 | 8.1387 | 11.5613 |
| 0.4BA 0.6IBA | 4 | 14.4000 | 3.30252 | 1.65126 | 9.1449 | 19.6551 |
| 0.6BA 0.4IBA | 4 | 9.1000 | 1.22746 | .61373 | 7.1468 | 11.0532 |
| Total | 16 | 10.9875 | 2.72320 | .68080 | 9.5364 | 12.4386 |

**Descriptives**

ShootperExplant

| | Minimum | Maximum |
|---|---|---|
| 0.4BA | 9.40 | 12.00 |
| 0.6BA | 8.40 | 11.00 |
| 0.4BA 0.6IBA | 9.60 | 17.00 |
| 0.6BA 0.4IBA | 7.40 | 10.00 |
| Total | 7.40 | 17.00 |

**Test of Homogeneity of Variances**

ShootperExplant

| Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|
| 2.265 | 3 | 12 | .133 |

**ANOVA**

ShootperExplant

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 66.608 | 3 | 22.203 | 5.970 | .010 |
| Within Groups | 44.630 | 12 | 3.719 | | |
| Total | 111.238 | 15 | | | |

## Post Hoc Tests

**Multiple Comparisons**

Dependent Variable: ShootperExplant

Tukey HSD

| (I) PGRs | (J) PGRs | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 0.4BA | 0.6BA | .75000 | 1.36367 | .945 | -3.2986 | 4.7986 |
| | 0.4BA 0.6IBA | -3.80000 | 1.36367 | .068 | -7.8486 | .2486 |
| | 0.6BA 0.4IBA | 1.50000 | 1.36367 | .696 | -2.5486 | 5.5486 |
| 0.6BA | 0.4BA | -.75000 | 1.36367 | .945 | -4.7986 | 3.2986 |
| | 0.4BA 0.6IBA | -4.55000* | 1.36367 | .026 | -8.5986 | -.5014 |
| | 0.6BA 0.4IBA | .75000 | 1.36367 | .945 | -3.2986 | 4.7986 |
| 0.4BA 0.6IBA | 0.4BA | 3.80000 | 1.36367 | .068 | -.2486 | 7.8486 |
| | 0.6BA | 4.55000* | 1.36367 | .026 | .5014 | 8.5986 |
| | 0.6BA 0.4IBA | 5.30000* | 1.36367 | .010 | 1.2514 | 9.3486 |
| 0.6BA 0.4IBA | 0.4BA | -1.50000 | 1.36367 | .696 | -5.5486 | 2.5486 |
| | 0.6BA | -.75000 | 1.36367 | .945 | -4.7986 | 3.2986 |
| | 0.4BA 0.6IBA | -5.30000* | 1.36367 | .010 | -9.3486 | -1.2514 |

*. The mean difference is significant at the 0.05 level.

## Homogeneous Subsets

**ShootperExplant**

Tukey HSD[a]

| PGRs | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| 0.6BA 0.4IBA | 4 | 9.1000 | |
| 0.6BA | 4 | 9.8500 | |
| 0.4BA | 4 | 10.6000 | 10.6000 |
| 0.4BA 0.6IBA | 4 | | 14.4000 |
| Sig. | | .696 | .068 |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

```
ONEWAY LeavesPerBranch BY PGRs
 /STATISTICS DESCRIPTIVES HOMOGENEITY
 /MISSING ANALYSIS
 /POSTHOC=TUKEY ALPHA(0.05).
```

## Oneway

**Notes**

| | | |
|---|---|---|
| Output Created | | 30-MAY-2016 00:22:09 |
| Comments | | |
| Input | Data | F:\4thApril_2wayAnova\Multiplication_rawFile_4thapril.sav |
| | Active Dataset | DataSet1 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 27 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| | Cases Used | Statistics for each analysis are based on cases with no missing data for any variable in the analysis. |
| Syntax | | ONEWAY LeavesPerBranch BY PGRs<br>/STATISTICS DESCRIPTIVES HOMOGENEITY<br>/MISSING ANALYSIS<br>/POSTHOC=TUKEY ALPHA(0.05). |
| Resources | Processor Time | 00:00:00.03 |
| | Elapsed Time | 00:00:00.34 |

[DataSet1] F:\4thApril_2wayAnova\Multiplication_rawFile_4thapril.sav

**Descriptives**

LeavesPerBranch

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 0.4BA | 4 | 4.3900 | .48484 | .24242 | 3.6185 | 5.1615 |
| 0.6BA | 4 | 7.5750 | 1.26062 | .63031 | 5.5691 | 9.5809 |
| 0.4BA 0.6IBA | 4 | 14.8500 | 1.70000 | .85000 | 12.1449 | 17.5551 |
| 0.6BA 0.4IBA | 4 | 10.3300 | 1.56916 | .78458 | 7.8331 | 12.8269 |
| Total | 16 | 9.2863 | 4.14178 | 1.03544 | 7.0793 | 11.4932 |

**Descriptives**

LeavesPerBranch

| | Minimum | Maximum |
|---|---|---|
| 0.4BA | 4.00 | 5.00 |
| 0.6BA | 6.00 | 9.00 |
| 0.4BA 0.6IBA | 12.40 | 16.00 |
| 0.6BA 0.4IBA | 8.32 | 12.00 |
| Total | 4.00 | 16.00 |

**Test of Homogeneity of Variances**

LeavesPerBranch

| Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|
| 1.159 | 3 | 12 | .366 |

**ANOVA**

LeavesPerBranch

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 235.785 | 3 | 78.595 | 43.807 | .000 |
| Within Groups | 21.530 | 12 | 1.794 | | |
| Total | 257.315 | 15 | | | |

## Post Hoc Tests

**Multiple Comparisons**

Dependent Variable: LeavesPerBranch

Tukey HSD

| (I) PGRs | (J) PGRs | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 0.4BA | 0.6BA | -3.18500* | .94713 | .025 | -5.9969 | -.3731 |
| | 0.4BA 0.6IBA | -10.46000* | .94713 | .000 | -13.2719 | -7.6481 |
| | 0.6BA 0.4IBA | -5.94000* | .94713 | .000 | -8.7519 | -3.1281 |
| 0.6BA | 0.4BA | 3.18500* | .94713 | .025 | .3731 | 5.9969 |
| | 0.4BA 0.6IBA | -7.27500* | .94713 | .000 | -10.0869 | -4.4631 |
| | 0.6BA 0.4IBA | -2.75500 | .94713 | .055 | -5.5669 | .0569 |
| 0.4BA 0.6IBA | 0.4BA | 10.46000* | .94713 | .000 | 7.6481 | 13.2719 |
| | 0.6BA | 7.27500* | .94713 | .000 | 4.4631 | 10.0869 |
| | 0.6BA 0.4IBA | 4.52000* | .94713 | .002 | 1.7081 | 7.3319 |
| 0.6BA 0.4IBA | 0.4BA | 5.94000* | .94713 | .000 | 3.1281 | 8.7519 |
| | 0.6BA | 2.75500 | .94713 | .055 | -.0569 | 5.5669 |
| | 0.4BA 0.6IBA | -4.52000* | .94713 | .002 | -7.3319 | -1.7081 |

*. The mean difference is significant at the 0.05 level.

## Homogeneous Subsets

**LeavesPerBranch**

Tukey HSD[a]

| PGRs | N | Subset for alpha = 0.05 | | |
|---|---|---|---|---|
| | | 1 | 2 | 3 |
| 0.4BA | 4 | 4.3900 | | |
| 0.6BA | 4 | | 7.5750 | |
| 0.6BA 0.4IBA | 4 | | 10.3300 | |
| 0.4BA 0.6IBA | 4 | | | 14.8500 |
| Sig. | | 1.000 | .055 | 1.000 |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

```
ONEWAY CallusDiameter BY PGRs
 /STATISTICS DESCRIPTIVES HOMOGENEITY
 /MISSING ANALYSIS
 /POSTHOC=TUKEY ALPHA(0.05).
```

## Oneway

**Notes**

| | | |
|---|---|---|
| Output Created | | 30-MAY-2016 00:22:54 |
| Comments | | |
| Input | Data | F:\4thApril_2wayAnova\Multiplication_rawFile_4thapril.sav |
| | Active Dataset | DataSet1 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 27 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| | Cases Used | Statistics for each analysis are based on cases with no missing data for any variable in the analysis. |
| Syntax | | ONEWAY CallusDiameter BY PGRs<br>/STATISTICS DESCRIPTIVES HOMOGENEITY<br>/MISSING ANALYSIS<br>/POSTHOC=TUKEY ALPHA(0.05). |
| Resources | Processor Time | 00:00:00.03 |
| | Elapsed Time | 00:00:00.08 |

[DataSet1] F:\4thApril_2wayAnova\Multiplication_rawFile_4thapril.sav

**Descriptives**

CallusDiameter

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 0.4BA | 4 | 8.1075 | .63174 | .31587 | 7.1023 | 9.1127 |
| 0.6BA | 4 | 7.9650 | .33191 | .16596 | 7.4369 | 8.4931 |
| 0.4BA 0.6IBA | 4 | 11.2675 | 1.69159 | .84580 | 8.5758 | 13.9592 |
| 0.6BA 0.4IBA | 4 | 9.4275 | 1.90783 | .95392 | 6.3917 | 12.4633 |
| Total | 16 | 9.1919 | 1.81128 | .45282 | 8.2267 | 10.1570 |

**Descriptives**

CallusDiameter

| | Minimum | Maximum |
|---|---|---|
| 0.4BA | 7.39 | 8.93 |
| 0.6BA | 7.51 | 8.28 |
| 0.4BA 0.6IBA | 10.00 | 13.67 |
| 0.6BA 0.4IBA | 8.03 | 12.14 |
| Total | 7.39 | 13.67 |

**Test of Homogeneity of Variances**

CallusDiameter

| Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|
| 2.149 | 3 | 12 | .147 |

**ANOVA**

CallusDiameter

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 28.179 | 3 | 9.393 | 5.359 | .014 |
| Within Groups | 21.032 | 12 | 1.753 | | |
| Total | 49.211 | 15 | | | |

## Post Hoc Tests

**Multiple Comparisons**

Dependent Variable: CallusDiameter

Tukey HSD

| (I) PGRs | (J) PGRs | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 0.4BA | 0.6BA | .14250 | .93612 | .999 | -2.6367 | 2.9217 |
| | 0.4BA 0.6IBA | -3.16000* | .93612 | .025 | -5.9392 | -.3808 |
| | 0.6BA 0.4IBA | -1.32000 | .93612 | .517 | -4.0992 | 1.4592 |
| 0.6BA | 0.4BA | -.14250 | .93612 | .999 | -2.9217 | 2.6367 |
| | 0.4BA 0.6IBA | -3.30250* | .93612 | .019 | -6.0817 | -.5233 |
| | 0.6BA 0.4IBA | -1.46250 | .93612 | .434 | -4.2417 | 1.3167 |
| 0.4BA 0.6IBA | 0.4BA | 3.16000* | .93612 | .025 | .3808 | 5.9392 |
| | 0.6BA | 3.30250* | .93612 | .019 | .5233 | 6.0817 |
| | 0.6BA 0.4IBA | 1.84000 | .93612 | .254 | -.9392 | 4.6192 |
| 0.6BA 0.4IBA | 0.4BA | 1.32000 | .93612 | .517 | -1.4592 | 4.0992 |
| | 0.6BA | 1.46250 | .93612 | .434 | -1.3167 | 4.2417 |
| | 0.4BA 0.6IBA | -1.84000 | .93612 | .254 | -4.6192 | .9392 |

*. The mean difference is significant at the 0.05 level.

# Homogeneous Subsets

**CallusDiameter**

Tukey HSD[a]

| PGRs | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| 0.6BA | 4 | 7.9650 | |
| 0.4BA | 4 | 8.1075 | |
| 0.6BA 0.4IBA | 4 | 9.4275 | 9.4275 |
| 0.4BA 0.6IBA | 4 | | 11.2675 |
| Sig. | | .434 | .254 |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.