PG-20

Find confidence interval of mean assuming normal distribution for the following data.

Height: 78,55,68,48,65,76,57,55,65,75,51,61,68,67,76,78,71,56,57,67,58,51,50,58,50,77,55,48,70,55,58,70,56,52,74,61,69,76,61,68,78,56,78,57,66,66,74,66,48,73,71,70,62,74,76,50,69,75,65,48

EXAMINE VARIABLES=Height

/PLOT BOXPLOT STEMLEAF

/COMPARE GROUPS

/STATISTICS DESCRIPTIVES

/CINTERVAL 95

/MISSING LISTWISE

/NOTOTAL.

**Explore**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Case Processing Summary** | | | | | | |
|  | Cases | | | | | |
| Valid | | Missing | | Total | |
| N | Percent | N | Percent | N | Percent |
| Height | 58 | 100.0% | 0 | 0.0% | 58 | 100.0% |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Descriptives** | | | | |
|  | | | Statistic | Std. Error |
| Height | Mean | | 64.22 | 1.248 |
| 95% Confidence Interval for Mean | Lower Bound | 61.72 |  |
| Upper Bound | 66.72 |  |
| 5% Trimmed Mean | | 64.36 |  |
| Median | | 66.00 |  |
| Variance | | 90.352 |  |
| Std. Deviation | | 9.505 |  |
| Minimum | | 48 |  |
| Maximum | | 78 |  |
| Range | | 30 |  |
| Interquartile Range | | 17 |  |
| Skewness | | -.193 | .314 |
| Kurtosis | | -1.221 | .618 |

Pg-74

|  |
| --- |
| Time in Minute |
| 35 |
| 20 |
| 30 |
| 45 |
| 60 |
| 40 |
| 65 |
| 40 |
| 25 |
| 50 |

T-TEST

/TESTVAL=0

/MISSING=ANALYSIS

/VARIABLES=timeinmin

/CRITERIA=CI(.95).

**T-Test**

[DataSet6]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **One-Sample Statistics** | | | | |
|  | N | Mean | Std. Deviation | Std. Error Mean |
| timeinmin | 10 | 41.00 | 14.491 | 4.583 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **One-Sample Test** | | | | | | |
|  | Test Value = 0 | | | | | |
| t | df | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference | |
| Lower | Upper |
| timeinmin | 8.947 | 9 | .000 | 41.000 | 30.63 | 51.37 |

Pg-77

Two kinds of manure were applied to sixteen one-hectare plot,other condition remaining the same. The yields in the quintals are given below:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Manure I | 18 | 20 | 36 | 50 |  |  |  |  |  |
| Manure II | 29 |  |  |  |  |  |  |  |  |