

Investigation 17: How Many Hours of Volunteer Time?

Worksheet 17.3 StatKey Directions

<http://www.lock5stat.com/StatKey/>

Steps:

1. Choose CI for Single Mean, Median, St Dev.

StatKey to accompany *Statistics: Unlocking the Power of Data* by Lock, Lock, Lock, Lock, and Lock

Descriptive Statistics and Graphs	Bootstrap Confidence Intervals	Randomization Hypothesis Tests
One Quantitative Variable	CI for Single Mean, Median, St.Dev.	Test for Single Mean
One Categorical Variable	CI for Single Proportion	Test for Single Proportion
One Quantitative and One Categorical Variable	CI for Difference In Means	Test for Difference in Means
Two Categorical Variables	CI for Difference In Proportions	Test for Difference In Proportions
Two Quantitative Variables	CI for Slope, Correlation	Test for Slope, Correlation

2. Choose Edit Data

StatKey Confidence Interval for a Mean, Median, Std. Dev.

Mustang Price (Price) ▼ Show Data Table Edit Data Upload File Change Column(s)

Generate 1 Sample Generate 10 Samples Generate 100 Samples Generate 1000 Samples Reset Plot

Bootstrap Dotplot of Mean ▼

3. Enter the volunteer hours as shown and check data has header row.

std. error = NaN

Edit data

Volunteer Hours

10
13
13
7
10
10
27
45
19
36
46
23
21
30
41
18
23
17
27
44

☐ First column is identifier

☒ Data has header row

Manually edit the values above or paste a tab or comma separated file into the box and click Ok. The file must have only one column (or two if there is an identifier).

Ok

4. Choose Generate 1000 samples

StatKey Confidence Interval for a Mean, Median, Std. Dev.

Mustang Price (Price) ▼ Show Data Table Edit Data Upload File Change Column(s)

Generate 1 Sample Generate 10 Samples Generate 100 Samples **Generate 1000 Samples** Reset Plot

Bootstrap Dotplot of Mean ▼

5. The dot plot will be displayed with the mean and standard error listed in the upper right-hand corner of the plot.
6. Check the box for Two-tail in the upper left-hand corner. Sample results are shown below. This gives an interval of the middle 95% of the bootstrap sample means.

