

# Fact Sheet – One Mean Tests

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## Identification

- The one mean test compares the unknown mean of a population to a particular value.
- The summary of the sample will include the mean, standard deviation, and size, or you could have a set of data instead.
- The data are quantitative (numerical) not qualitative (categorical).

## Differences

**Step 1:** Use the symbol  $\mu$  instead of the symbol  $p$ .

**Step 3:** “One Mean Test”

**Step 4:** The test statistic is  $t$ , not  $z$ .

**Conditions:**  $20n \leq N$ , Normally Distributed (with data), No Outliers (with data)

## StatCrunch Directions

**With Summary:** Stat > T Statistics > One Sample > Summary

- Enter sample data, click Next.
- Enter value of  $\mu_0$ , select alternative hypothesis.

**With Data:**

- Create QQ Plot. Verify that the graph is linear & correlation is greater than 0.9.
- Create Boxplot. Verify that there are no outliers.
- Stat > T Statistics > One Sample > Data
- Select column containing the data, click Next.
- Enter value of  $\mu_0$ , select alternative hypothesis.