In 11 test runs a brand of harvesting machine operated for 10.1, 12.2, 12.4, 12.4, 9.4, 11.2, 14.8, 12.6, 10.1, 9.2, and 11.0 hours on a tank of gasoline.

1. Enter the values into a variable (*see left figure, below*).



- 2. Select Analyze \rightarrow Descriptive Statistics \rightarrow Q–Q Plots... (see right figure, above).
- 3. Select "Hours of Operation" as the variable and click the "Standardize values". Be sure that the Test Distribution selected is "Normal" and then click "OK" (*see the figure below*).

| 🔲 Q-Q Plots | | |
|-------------|--|---|
| | Variables: | Test Distribution OK Normal Image: Constribution df: Image: Constribution Distribution Parameters Reset Image: Constribution Cancel Location: Image: Constribution Scale: 1 |
| | Transform Natural log transform Standardize values Difference: Seasonally difference: Current Periodicity: None | Proportion Estimation Formula Image: Blom's Image |

4. Your output should look like this.



5. Determine if the data is approximately normally distributed.

As long as the points follow approximately along the diagonal line, conclude that the data is approximately normally distributed.

If the points have a distinct curvature, then the data is likely to be skewed.

If the points follow an "S-curve" shape, then the data is likely to be uniform (flat).