## Figure 1.

## **Test Statistic**

 Assume to begin with that H0 is true. The sample mean x-bar is our best estimate of μ, and we use it in a standardized form as the test statistic:

$$z = \frac{\overline{x} - \mu_0}{\sigma / \sqrt{n}} \approx \frac{\overline{x} - \mu_0}{s / \sqrt{n}}$$

### Figure 2.

# **Test Statistic**

 Assume to begin with that H0 is true. The sample mean x-bar is our best estimate of μ, and we use it in a standardized form as the test statistic:

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## **Test Statistic**

 Assume to begin with that H0 is true. The sample mean x-bar is our best estimate of μ, and we use it in a standardized form as the test statistic:

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## Figure 4.

### **Test Statistic**

 Assume to begin with that H<sub>0</sub> is true. The sample mean x-bar is our best estimate of μ, and we use it in a standardized form as the test statistic:

$$z = \frac{\overline{x} - \mu_0}{\sigma / \sqrt{n}} \approx \frac{\overline{x} - \mu_0}{s / \sqrt{n}}$$