<u>EXAMPLE 1</u>: A researcher claims that the average number of years that recent college graduates stay at his/her first job is 3.4 years. A survey of 55 randomly selected college graduates found that the average time at his/her first job was 2.9 years with a standard deviation of 1.1 years. Test the claim using a significance level of .10. Use both the critical value and *P*-value methods.

<u>EXAMPLE 2</u>: A study of 32 randomly selected shoppers in a grocery store found that the mean purchase total was \$98.76 with a standard deviation of \$14.86. The store claims that the average amount spent is under \$100. Test this claim using both the critical value and the P-value methods.

<u>EXAMPLE 2</u> (re-do): Suppose the mean purchase total was 95.40 with a standard deviation of 14.86. Use only the *P*-value method.