

**TEST YOUR KNOWLEDGE: Sampling Distributions**

**1. The Bluth Company manufactures desks with a (population) average life of 20.0 years and a population standard deviation of 4.5 years. Average life of a Bluth desk is normally distributed.**

**(a) What proportion of Bluth desks will last more than 26 years? \_\_\_\_\_**

**(b) What proportion of sample means of Bluth desks based on sample sizes of  $n = 100$ , will be greater than 20.0 years? \_\_\_\_\_**

**(c) What proportion of sample means of Bluth desks based on sample sizes of  $n = 100$ , will be greater than 20.8 years? \_\_\_\_\_**

**(d) What proportion of sample means of Bluth desks based on sample sizes of  $n = 64$ , will be greater than 20.8 years? \_\_\_\_\_**