**1:**  Given the standardized normal distribution (with a mean of 0 and a standard deviation of 1, as in table E.2), what is the probability that

A: Z is less than 1.57?

B: Z is greater than 1.84?

C: Z is between 1.57 and 1.84?

D: Z is less than 1.57 or greater than 1.84?

**2:**  The breaking strength of plastic bags used for packaging produce is normally distributed, with a mean of 5 pounds per square inch and a standard deviation of 1.5 pounds per square inch.  What proportion of the bags have a breaking strength of

A: less than 3.17 pounds per square inch?

B: at least 3.6 pounds per square inch?

C: between 5 and 5.5 pounds per square inch?

D: 95% of the breaking strengths will be contained between what two values symmetrically distributed around the mean?

**3**:  A statistical analysis of 1,000 long-distance telephone calls made from the headquarters of the Bricks and Clicks Computer Corporation indicates that the length of these calls is normally distributed, with the mean = 240 seconds and the standard deviation = 40 seconds.

A: What is the probability that a call lasted less than 180 seconds?

B: What is the probability that a call lasted between 180 and 300 seconds?

C: What is the probability that a call lasted between 110 and 180 seconds?

D: What is the length of a call if only 1% of all calls are shorter?