1)Adult American males have normally distributed heights with a mean of 5.8 feet and a

standard deviation of 0.2 feet. What is the probability that a randomly chosen adult American male will have a height between 5.6 feet and 6.0 feet?

A. 0.6826

B. 0.5000

C. 0.9544

D. 0.7500

2)A jar contains 12 red jelly beans, 20 yellow jelly beans, and 16 orange jelly beans.

Suppose that each jelly bean has an equal chance of being picked from the jar.

If a jelly bean is selected at random from the jar, what is the probability that it is not red?

3)Which of the following statements is NOT true?

A. A probability must be less than or equal to 1.

B. If an event cannot possibly occur, then the probability of the event is a negative number.

C. If only two outcomes are possible for an experiment, then the sum of the probabilities of

the outcomes is equal to 1.

D. If events E and F are mutually exclusive events, then P(E Ç F) = 0.

4)In a certain manufacturing process, the probability of a type I defect is 0.09, the probability of a type II defect is 0.11, and the probability of having both types of defects is 0.03.

Find the probability that neither defect occurs.

A. 0.97

B. 0.77

C. 0.83

D. 0.80

5)Which of the following statements is NOT true?

A. The variance is the square root of the standard deviation.

B. The variance is a measure of the dispersion or spread of a distribution about its mean.

C. If all of the data values in a data set are identical, then the standard deviation is 0.

D. The variance must be a nonnegative number.

6)A contest has 20 finalists. One finalist is awarded first prize, another finalist is awarded

second prize, and another is awarded third prize. How many different ways could the prizes be awarded?

7)An advisory board of 5 students is to be chosen from a group of 12 students.

8 of the students are seniors and 4 of the students are juniors.

(a) In how many ways can the advisory board of 5 students be chosen from the group of 12 students?

(b) In how many ways can the 5-member advisory board be chosen from the group of 12

students, if 3 members must be seniors and 2 members must be juniors?

(c) If the 5-member advisory board is selected at random from the group of 12 students , what is the probability that the board consists of 3 seniors and 2 juniors?

8)According to a recent report, 0.65 is the probability that an American household is owner occupied. Six Americans households are randomly selected. Find the probability that exactly 4 of the 6 American households are owner-occupied.