13-4

Practice

Probabilities of Compound Events

Determine if each event is independent or dependent. Then determine the probability.

1. the probability of drawing a black card from a standard deck of cards, replacing it, then drawing another black card

2. the probability of selecting 1 jazz, 1 country, and 1 rap CD in any order from 3 jazz, 2 country, and 5 rap CDs, replacing the CDs each time

3. the probability that two cards drawn from a deck are both aces

Determine if each event is mutually exclusive or mutually inclusive. Then determine each probability.

4. the probability of rolling a 3 or a 6 on one toss of a number cube

5. the probability of selecting a queen or a red card from a standard deck of cards

6. the probability of selecting at least three white crayons when four crayons are selected from a box containing 7 white crayons and 5 blue crayons

7. ***Team Sports*** Conrad tried out for both the volleyball team and the football team. The probability of his being selected for the volleyball team is $\frac{4}{5}$, while the probability of his being selected for the football team is $\frac{3}{4}$. The probability of his being selected for both teams is $\frac{7}{10}$. What is the probability that Conrad will be selected for either the volleyball team or the football team?