Mutually Exclusive/ Non-Mutually Exclusive Worksheet(7.3)

Determine if each event is *mutually exclusive* or *non-mutually exclusive*. Then determine the probability of each.

1. Find the probability of choosing a penny or a dime from 4 pennies, 3 nickels and 6 dimes.

2. Find the probability of selecting a boy or a blond-haired person from 12 girls, 5 of whom have blond hair, and 15 boys, 6 of whom have blond hair.

3. Find the probability of drawing a king or queen from a standard deck of cards.

4. The probability for a driver's license applicant to pass the road test the first time is 5/6. The probability of passing the written test on the first attempt is 9/10. The probability of passing both test the first time is 4/5. Are the events mutually exclusive? What is the probability of passing either test on the first attempt?

5.Find the probability of tossing two dice and showing at least one 4.

6. Find the probability of selecting an ace or a red card from a deck of cards.

7. Determine the probability that a card drawn from a deck is red or a face card.

8. Find the probability of two dice being tossed and showing a sum of 6 or a sum of 9.

9. A weather forecaster states that the probability of rain is 3/5, the probability of lightning is 2/5, and the probability of both is 1/5. What is the probability of a sporting event being cancelled due to rain or lightning?

10. A bag contains cards numbered from 1 to 14. One card is drawn at random. Find the probability of:
a) selecting a prime number or a multiple of four.
b) selecting a multiple of two or a multiple of three.
c) selecting a 3 or a 4.
d) selecting an 8 or a number less than 8.