

**9-7****Practice: Skills*****Independent and Dependent Events***

1. Four coins are tossed. What is the probability of tossing all heads?
2. One letter is randomly selected from the word PRIME and one letter is randomly selected from the word MATH. What is the probability that both letters selected are vowels?
3. A card is chosen at random from a deck of 52 cards. It is then replaced and a second card is chosen. What is the probability of getting a jack and then an eight?

**For Exercises 4–6, use the information below.**

A standard deck of playing cards contains 52 cards in four suits of 13 cards each. Two suits are red and two suits are black. Find each probability. Assume the first card is replaced before the second card is drawn.

4.  $P(\text{black, queen})$
5.  $P(\text{black, diamond})$
6.  $P(\text{jack, queen})$
7. What is the probability of spinning a number greater than 5 on a spinner numbered 1 to 8 and tossing a tail on a coin?
8. Two cards are chosen at random from a standard deck of cards with replacement. What is the probability of getting 2 aces?
9. A CD rack has 8 classical CDs, 5 pop CDs, and 3 rock CDs. Two CDs are chosen without replacement. What is the probability of choosing a rock CD then a classical CD?
10. A jar holds 15 red pencils and 10 blue pencils. What is the probability of drawing two red pencils from the jar?