Kerry Ojakian's MTH 23.5 Class Class Assignment #11

Two cards are drawn from a regular deck of 52 cards, with replacement.

- 1. What is the probability that the first card is red and the second is black?
- 2. What is the probability that the first card is red and the second is red?
- 3. What is the probability that the first card is a Jack and the second is a Queen?
- 4. What is the probability the first card is a Heart and the second is a Diamond?
- 5. What is the probability the first card is NOT a King and the second is a King?

Two cards are drawn from a regular deck of 52 cards, without replacement.

- 6. What is the probability that the first card is red and the second is black?
- 7. What is the probability that the first card is red and the second is red?
- 8. What is the probability that the first card is a Jack and the second is a Queen?
- 9. What is the probability the first card is a Heart and the second is a Diamond?
- 10. What is the probability the first card is NOT a King and the second is a King?

- A jar contains 4 red marbles, 6 blue marbles, and 6 yellow marbles.
 - 11. Suppose you take 2 marbles, without replacement. What is the probability that you take 1 blue and 1 yellow, in any order.

12. Suppose you take 2 marbles, with replacement. What is the probability that you take 1 blue and 1 yellow, in any order.

13. Suppose you take 3 marbles, without replacement. What is the probability that all are blue?

14. Suppose you take 3 marbles, without replacement. What is the probability that at least one is not yellow?