

Name: _____ Period: _____ Date: _____

Theoretical and Experimental Probability Exit Quiz

Solve the following problems Permutation and Combination.

1. What is the probability of drawing a king from a 52 card deck of cards?
2. What is the probability of getting a number greater than 3 when rolling a die?
3. What is a probability of drawing a heart card from a 52 card deck of card?
4. Inside a box there are 5 red marbles, 6 green marbles and 4 blue marbles. What is the probability of getting a blue marble?
5. What is the probability of drawing two spade from a 52 card deck of cards?

Theoretical and Experimental Probability Exit Quiz

Answer:

Solve the following problems Permutation and Combination.

1. What is the probability of drawing a king from a 52 card deck of card?

$$P(E) = 4/52 \text{ or } 1/13$$

2. What is the probability of getting a number greater than 3 when rolling a die?

$$P(E) = 3/6 \text{ or } 1/2$$

3. What is a probability of drawing a heart from a 52 card deck of card?

$$P(E) = 13/52 \text{ or } 1/4$$

4. Inside a box there are 5 red marbles, 6 green marbles and 4 blue marbles. What is the probability of getting a blue marble? $n(S) = 15$; $n(E) = 4$ then $P(E) = 4/15$

5. What is the probability of drawing two spades from a 52 card deck of cards?

$$n(S) = {}_{52}C_2 = 1326; n(E) = {}_{13}C_2 = 78, \text{ then } P(E) = 78/1326 \text{ or } 1/17$$