Name: _____ Period: _____ Date: _____

Theoretical and Experimental Probability Bell Work

Solve problems involving Theoretical Probability.

1. What is the probability of getting an odd number in tossing a die?

2. What is a probability of drawing a black card in a 52 deck of card?

3. What is the probability of drawing a queen in 52 deck of card?

In rolling a pair of dice

4. What is the probability of getting a sum of 5?   5. What is the probability of getting a sum greater than 9?

In tossing a coin

6. What is the probability of getting both tails?   7. What is the probability of not getting both head?

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Theoretical and Experimental Probability Bell Work

From a deck of cards, two cards are drawn at random. What is the probability that:

8. All two are jack?

9. All two are hearts?

10. All red black?

Theoretical and Experimental Probability Bell Work

Answer:

Solve problems involving Theoretical Probability.

1. What is the probability of getting an odd number in tossing a die?
P(E) = 3/6 or ½

2. What is a probability of drawing a black card in a 52 deck of card?
P (E) = 26/ 52 or ½

3. What is the probability of drawing a queen in 52 deck of card?
P (E) = 4/52 or 1/13

In rolling a pair of dice

4. What is the probability of getting a sum of 5?
n(S) = 36; n(E) = {(1,4),(4,1),(3,2),(2,3)}= 5 , P(E) = 4/36 or 1/9

5. What is the probability of getting a sum greater than 9?
n(S) = 36; n(E) = {(5,5),(6,4),(4,6),(6,5),(5,6),(6,6)}= 6 , P(E) = 6/36 or 1/6

In tossing a coin

6. What is the probability of getting both tails?
n(S) = 4; n(E) = 1, then P(E) = 1/4

7. What is the probability of not getting both head?
n(S) =4; n(E) = 3, then P(E) = 3/4

From a deck of cards, two cards are drawn at random. What is the probability that:

8. All two are jack?
n(S) = $_{52}C_2$ =1326
n(E) = $_4C_2$ = 6
P(E) = 6/1326 or 1/221

9. All two are hearts?
n(S) = $_{52}C_2$ =1326
n(E) = $_{13}C_2$ = 78
P(E) = 78/1326 or 1/17

10. All red black?
n(S) = $_{52}C_2$ =1326
n(E) = $_{26}C_2$ = 325
P(E) = 325/1326 or 25/102