

Name: _____ Date: _____ Rating/Score: _____

A. HEAD OR TAIL

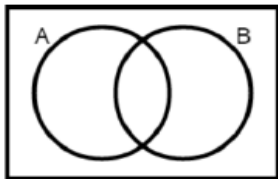
Directions: Fill in the blanks.

Event: In a volleyball game, the referee tosses a coin to determine who will get to serve first. Team A chose “Head”.

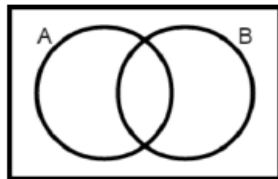
1. When we toss a coin, the possible outcomes are _____.
2. There are _____ possible outcomes.
3. If “Head” came out after the referee tossed the coin, then this is a _____ for Team A.
4. The number of favorable outcomes is _____.
5. The probability of the getting “Head” is _____.

B. SHADE IT UP

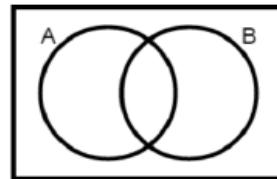
Directions: In each Venn diagram, shade the indicated operation.



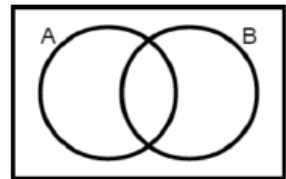
A



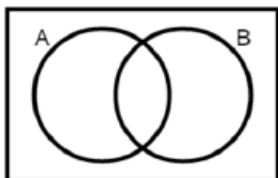
$A \cup B$



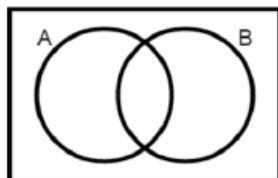
$A \cap B$



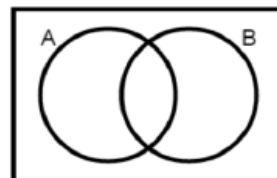
B'



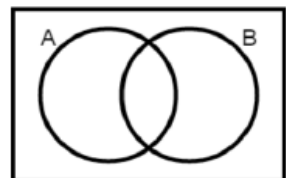
$A \cup B'$



$A' \cap B$



$A' \cap B'$



$(A \cup B)'$

Quarter 3 Week: 6

Competencies: illustrates events, and union and intersection of events.

Notes to teachers: This material serves as summative assessment.

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C. VENN DIAGRAM

Directions: Read and understand the problem. Write your solution and answer inside the box.

1. Suppose a die is rolled. Let A be the event that an even number turns up and let B be the event that an odd number appears. Determine the possible outcomes of events A and B . Draw a Venn diagram to illustrate that they are mutually exclusive events.

Answer:

2. Given: $U = \{a, b, c, d, e, f, g\}$
 $A = \{a, b, c, d\}$
 $B = \{c, d, e, f, g\}$
Find $A \cup B$. Draw a Venn diagram to illustrate $A \cup B$.

Answer:

3. A die is tossed.
Sample space $S = \{1, 2, 3, 4, 5, 6\}$
Let A = event that an odd number occurs
 B = event that a number greater than 4 occurs
Determine the elements of A and B . Find $A \cup B$ then draw a Venn diagram to illustrate $A \cup B$.

Answer:

D. Experiment Time!!!

From the given experiment, determine the sample space and the number of outcomes (the first is done for example).

Experiment	Sample Space as list	Number of Outcomes
Tossing 2 coin	{Head, Tail}	2
Rolling a Die		
Draw a card from a standard deck		
Rolling a pair of Dice		

Draw the tree diagram of the experiment to determine the sample space and the number of outcomes: (the first experiment is already done for you).

Experiment	Tree Diagram	Sample Space	Number of Outcomes
Tossing 2 coins		{HH, HT, TH, TT}	4
Tossing a coin and rolling a die			

From the activity above, answer the following guide questions:

- What is the probability of both tails turning up when you tossed 2 coins?

- If a card is drawn from an ordinary deck of 52 cards, find the probability of getting a heart and a queen. _____
- What is the probability that the die shows an odd number or a number less than six? _____
- How many outcomes are there if we simultaneously roll a 6-sided die and throw a coin? _____
- When the die is rolled, find the probability of getting greater than 3.

Quarter 3 Week: 7

Competencies: Illustrates the Probability of a union of two events M10SP-IIIg-1

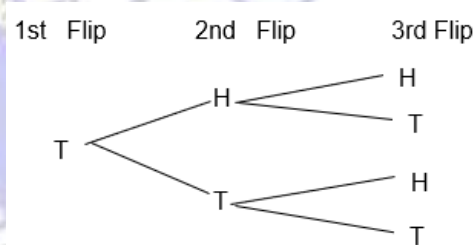
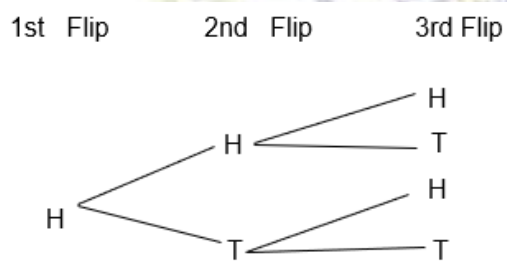
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E. MULTIPLE CHOICE

DIRECTIONS: Read and understand each item carefully. Choose the letter of the best answer.

1. A pair of dice is tossed, find the probability of obtaining a sum of 6.
a) $\frac{7}{36}$ b) $\frac{6}{36}$ c) $\frac{5}{36}$ d) $\frac{4}{36}$
2. In tossing a coin twice, how many are the possible outcomes?
a) 1 b) 2 c) 3 d) 4
3. Two dice are rolled. Find the probability of getting a sum greater than 10 or less than 5.
a) $\frac{5}{12}$ b) $\frac{1}{4}$ c) $\frac{7}{18}$ d) $\frac{3}{4}$
4. If a card is drawn from an ordinary deck of 52 cards, find the probability of getting a diamond or a face card.
a) $\frac{25}{52}$ b) $\frac{3}{52}$ c) $\frac{11}{26}$ d) $\frac{7}{13}$
5. Using the tree diagram below, how many possible outcomes are there if 3 coins were flipped?



- a) 3 b) 4 c) 6 d) 8
6. Andrei roll a fair six-sided die. What is the probability that the die shows an even number and a number less than six?
a) $\frac{5}{6}$ b) $\frac{1}{6}$ c) $\frac{1}{3}$ d) $\frac{2}{3}$
 7. How many outcomes are there if we simultaneously roll a 6-sided die and throw a coin?
a) 10 b) 12 c) 14 d) 16
 8. Find the probability of getting at least one “4” in a roll of two dice.
a) $\frac{17}{36}$ b) $\frac{1}{36}$ c) $\frac{11}{36}$ d) $\frac{1}{3}$
 9. Arianne got coins from her pocket, which accidentally rolled on the floor. If there were 16 probable outcomes, how many coins fell on the floor?
a) 3 b) 4 c) 8 d) 16

Quarter 3 Week: 7

Competencies: Illustrates the Probability of a union of two events M10SP-IIIg-1

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