

By the end of this lesson you will be able to _____.

What is Probability? _____.

What three ways can probability can be represented?

1) _____ 2) _____ 3) _____

What values represent Certain? _____

What values represent As Likely As Not? _____

What values represent Impossible? _____


What are independent events? _____.

How is rolling a die an independent event?

How is flipping a coin an independent event?

Example 1: Using an Area Model

What is the probability that you can roll a _____ on a die and flip _____ up on a coin?

Outcomes for the 2nd event 

What is the ratio we use for probability?

Outcomes for the 1st event



How many outcomes do the two events have together?

What is the probability of the events occurring together?

As a fraction? _____

As a decimal? _____

As a percent? _____

Example 2: Using Multiplication

What is the probability that you can flip _____ up on a coin and roll a _____ on a 12-sided die?

Outcomes for
the 2nd event



Outcomes for
the 1st event



What is the probability for the first event to occur? _____ 2nd Event to occur? _____

What operation will you use to determine the probability of these events occurring together? _____

What is the probability for these events to occur together?

As a fraction? _____

As a decimal? _____

As a percent? _____

Example 3: With Replacement

What is the probability that you can pick a red card put it back in the deck and pick the black card?



What is the probability for the first event to occur? _____ 2nd Event to occur? _____

What operation will you use to determine the probability of these events occurring together? _____

What is the probability for these events to occur together?

As a fraction? _____

As a decimal? _____

As a percent? _____

Example 4: With Replacement

What is the probability that you can pick the Ace of Hearts, put it back in the deck, and pick the King of Clubs?

What is the probability for the first event to occur? _____ 2nd Event to occur? _____

What operation will you use to determine the probability of these events occurring together? _____

What is the probability for these events to occur together?

As a fraction? _____

As a decimal? _____

As a percent? _____

Your Turn to Practice. [fill in the missing information for each problem using the video]

Find the probability of the events. Write as a fraction, decimal and a percent. Round to the nearest thousandths when necessary.

- 1) Probability of rolling an _____ number on a standard die and flipping a _____.

- 2) Probability of choosing two vowels, with replacement, from the word _____.

- 3) Probability of picking an _____ number, putting it back, and then picking a multiple of _____, from the numbers _____.

- 4) Probability of rolling a die three times, all coming up _____ numbers.

- 5) Probability of picking a red gumball, replace it and then choose a blue gumball, from _____ red and _____ blue gumballs.