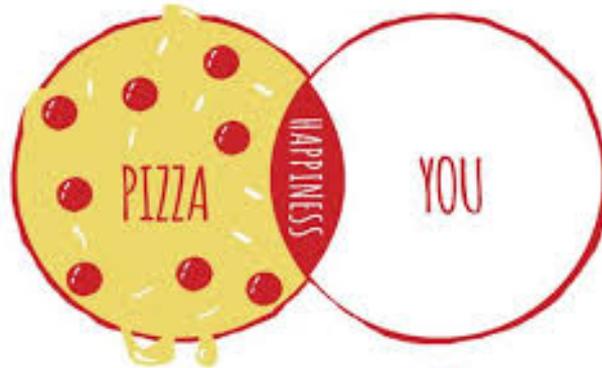
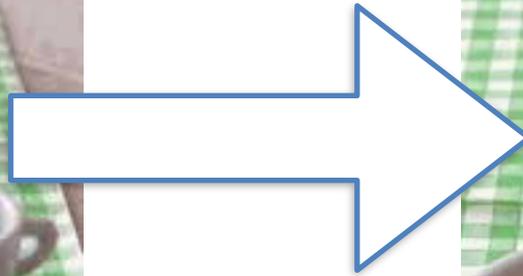


Describing Events



By the end of this lesson, I will be able to answer the following questions...

1. How do I read Venn Diagrams?
2. How do I read a frequency table?
3. What are the common symbols used for statistics and how do I interpret them?

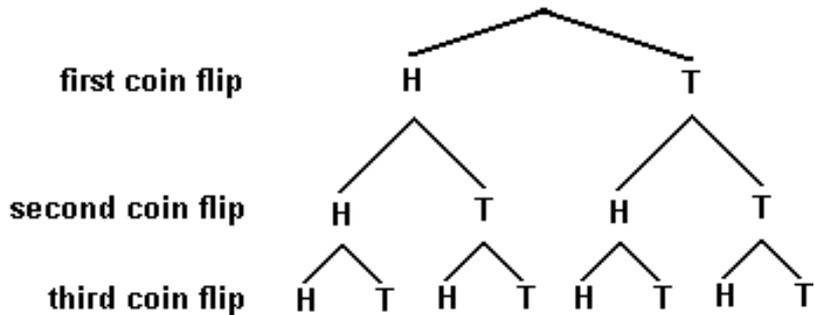
Vocabulary

1. Union - When event A or B happens. $A \cup B$
2. Intersection - When event A and B happens. $A \cap B$
3. Not - When event A doesn't happen. \bar{A}
4. Set Notation - {Sample Space}

Prerequisite Skills with Practice

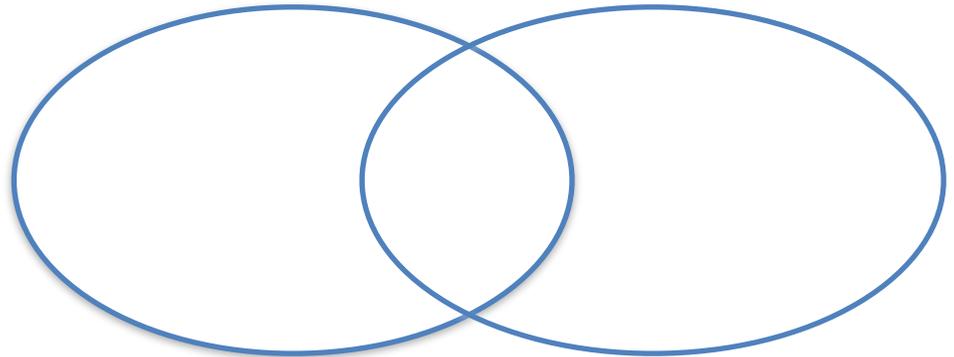
Drawing a **Tree Diagram** to understand a a sample space of all possible outcomes.

“A coin flipped three times”



Drawing a **Venn Diagram** to understand a a sample space of all possible outcomes.

“Pizza Toppings”



A hamster is chosen at random.
List the sample space and then
describe the following events...

Hamster	Wheel Runners Club	Tube Tunnelers Club	Fuzzy Friends Club
Saul	X		X
Beatriz		X	
Andre	X	X	X
Ralph			X
Iris	X		

List the Sample Space.

Describe the following events

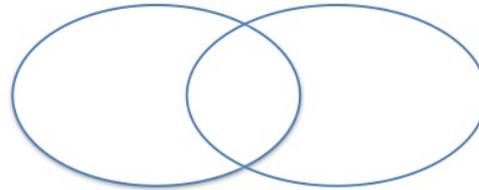
{Saul, Andre, Iris}

{Saul, Ralph, Iris}

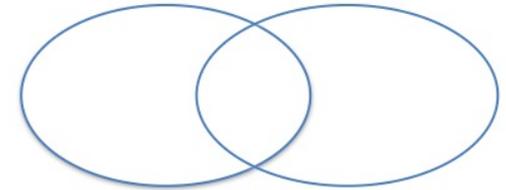
{Beatriz, Ralph}

Expanding on the Venn Diagram

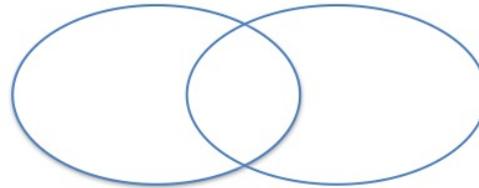
Given Event A and Event B...



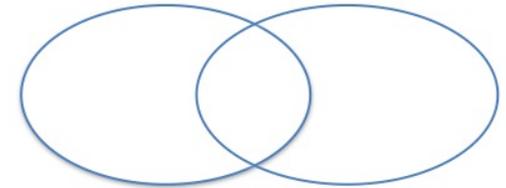
$$P(A)$$



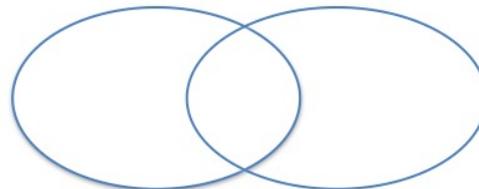
$$P(A \cap B)$$



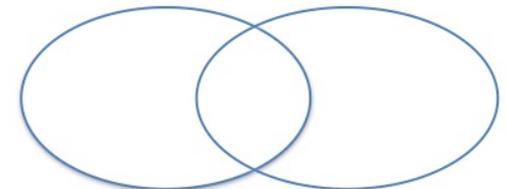
$$P(\bar{B})$$



$$P(A \cup B)$$



$$P(\overline{A \cap B})$$



$$P(\overline{A \cup B})$$

THE END



Visit [PlottsMath](#) for assignment details