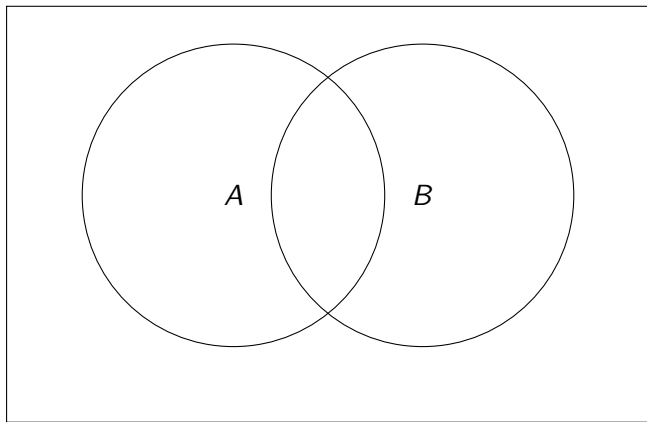# Probability Concepts

Probability concepts

This slide show covers a few concepts and tools you may find useful for calculating probabilities... there is a lot left out here.

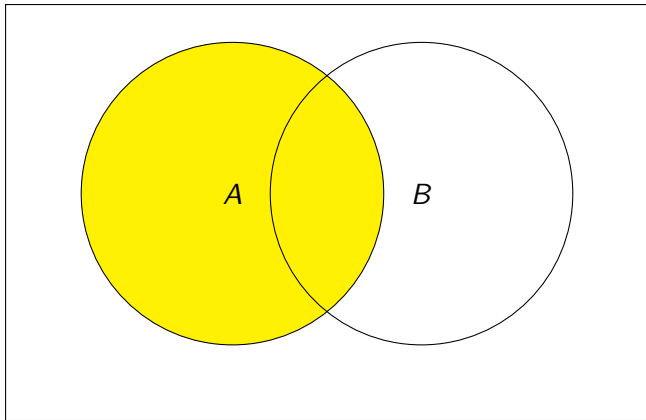# Venn diagrams

This Venn diagram represents the event space for two events, A and B. The area inside of the rectangle is 1.
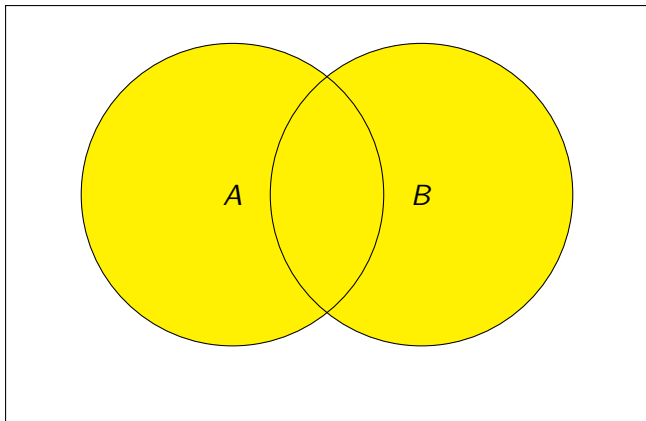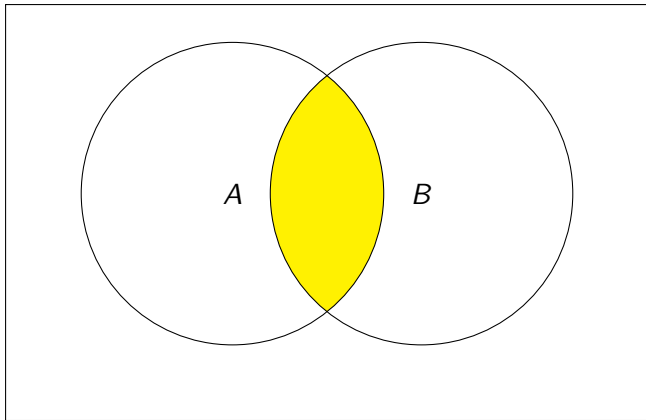
Venn diagrams: P(A)

This represents P(A).

Union

This represents P($A \cup B$).

Intersection

This represents P($A \cap B$).

Conditional Probability

The probability of A, conditional on B is written as $P(A \mid B)$.

$$P(A \mid B) = \frac{P(A \cap B)}{P(B)}$$