

Probability

$$P(A) = \frac{n(A)}{n(S)}$$

$$P(\bar{A}) = 1 - P(A)$$

$$0 \leq P(A) \leq 1$$

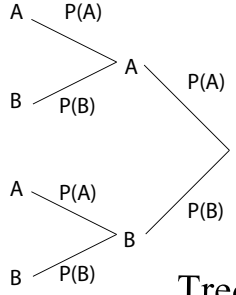
One Event

Combination of 2 Events

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

The probability for the occurrence of events A or B or both

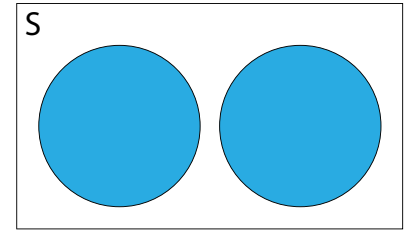
$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$



Tree Diagram

Independent Events

Mutually Exclusive Events



$$P(A \cap B) = P(A) \times P(B)$$

$$P(A \cap B \cap C) = P(A) \times P(B) \times P(C)$$

$$A \cap B = \phi$$

$$P(A \cup B) = P(A) + P(B)$$

