Probability: AND

Objectives

1. Calculate probabilities using the Multiplication Rule

Example 1

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$$P(\text{heads and } 5) = \frac{1}{12}$$

Multiplication Rule

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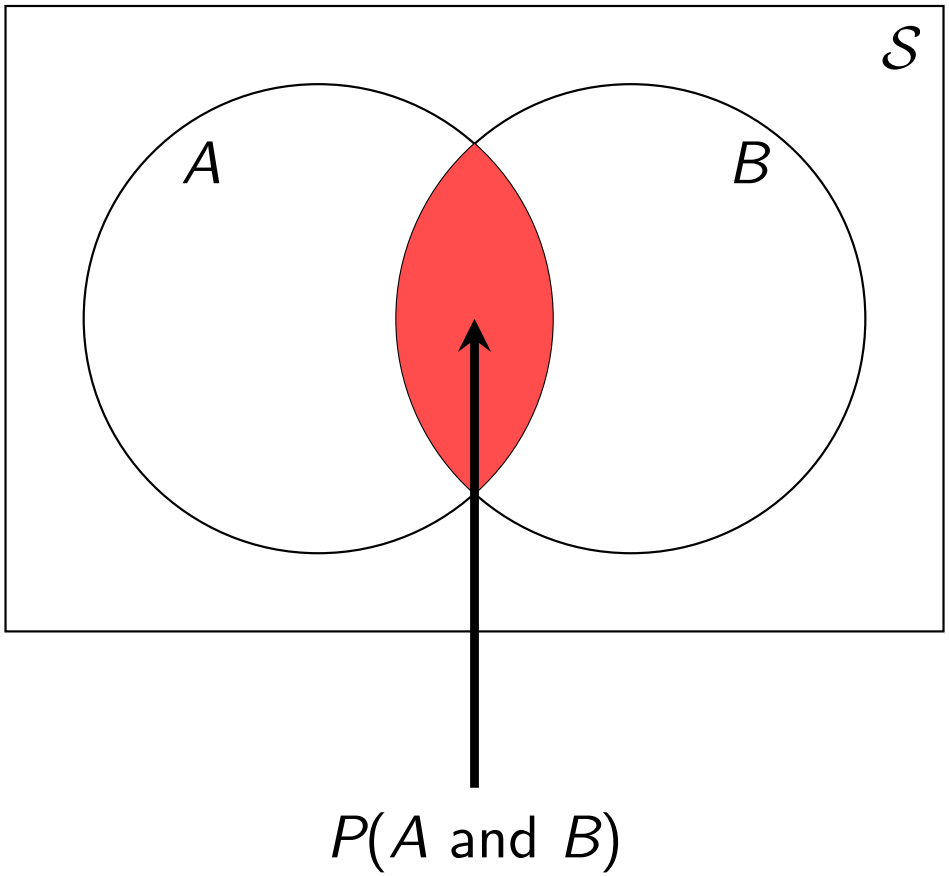
If $P(A)$ is the probability of event A occurring, and $P(B)$ is the probability of event B occurring, then

$$P(A \text{ and } B) = P(A) \times P(B)$$

Venn Diagram – AND



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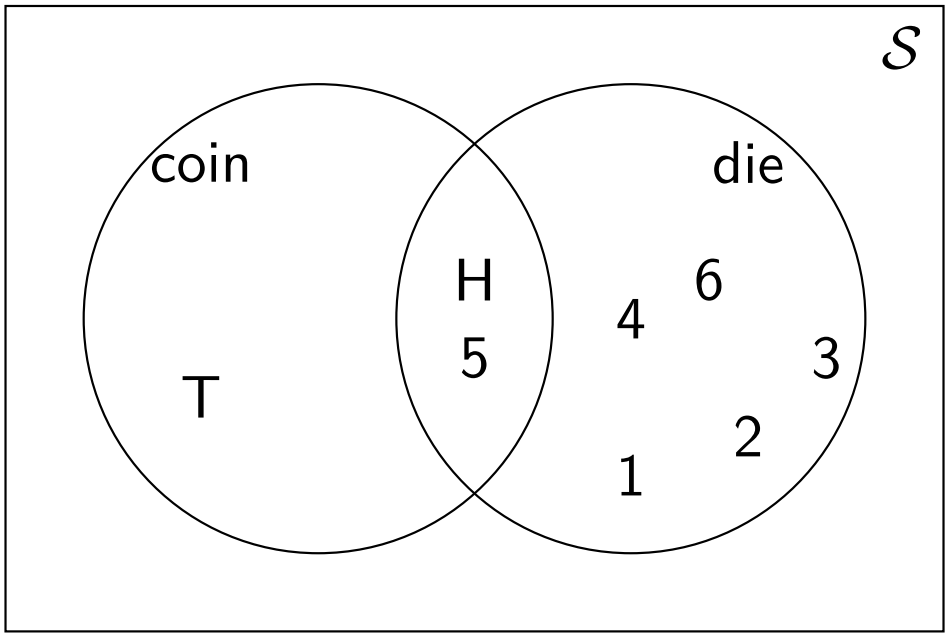

Tree Diagram