

# Rolling two fair dice

Assume that two independent fair dice are tossed. There are 36 equally likely possible outcomes.

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 2) = 1/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 3) = 2/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 4) = 3/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 5) = 4/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 6) = 5/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 7) = 6/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 8) = 5/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 9) = 4/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 10) = 3/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad \begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 11) = 2/36$$

$$\begin{array}{|c|c|} \hline \cdot & \cdot \\ \hline \end{array} \quad P(\text{sum} = 12) = 1/36$$