

a Two fair coins are flipped. How many outcomes are there? 4 outcomes for two coins	b Two fair coins are flipped. Find $P(\text{a head and a tail})$. $\frac{2}{4} = \frac{1}{2}$ one of each happens two ways	c How many outcomes are there when a coin is flipped and a dice is rolled? 12 multiply the outcomes	d A fair coin is flipped and a fair dice is rolled. Find $P(\text{head and 6})$. $\frac{1}{12}$ one outcome of a combined event
e Two fair dice are rolled. How many outcomes are there? 36 outcomes for two dice	f Two fair dice are rolled. Find $P(\text{total of 7})$. $\frac{6}{36} = \frac{1}{6}$ a total made more than one way	g Two fair dice are rolled. Find $P(\text{total of 9 or more})$. $\frac{10}{36} = \frac{5}{18}$ an event of several totals	h Two fair dice are rolled. Find $P(\text{at least one 6})$. $\frac{11}{36}$ at least one: count the double once
i Two fair dice are rolled. Find $P(\text{the product is odd})$. $\frac{9}{36} = \frac{1}{4}$ a product grid	j Two fair dice are rolled. Find $P(\text{a difference of 2})$. $\frac{8}{36} = \frac{2}{9}$ a difference, both orders	k Two spinners are numbered 1 to 3 and 1 to 4. Both are spun. Find $P(\text{total of 5})$. $\frac{3}{12} = \frac{1}{4}$ two spinners of different sizes	l Three fair coins are flipped. How many outcomes are there? 8 three events: list them all

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