



Probability Sample Space - Sample Space Count and Favourable Outcomes

Definition to Probability

1

Two fair coins are flipped. There are 4 equally likely outcomes in the sample space. A favourable outcome is one where there is exactly one tail.

What is the probability of getting a favourable outcome?

A	$\frac{3}{4}$	B	$\frac{1}{2}$
C	$\frac{1}{4}$	D	$\frac{2}{5}$

A fair coin is flipped and a fair six-sided die is rolled. There are 12 equally likely outcomes in the sample space. A favourable outcome is one where the die shows a number less than 3.

What is the probability of getting a favourable outcome?

A	$\frac{2}{3}$	B	$\frac{1}{3}$
C	$\frac{1}{2}$	D	$\frac{5}{12}$

3

A fair coin is flipped and a spinner with red, green, and blue sections is spun. There are 6 equally likely outcomes in the sample space. A favourable outcome is one where the coin shows heads.

What is the probability of getting a favourable outcome?

A	$\frac{1}{3}$	B	$\frac{1}{2}$
C	$\frac{2}{3}$	D	$\frac{3}{7}$

4

A spinner with three equal-sized sections coloured red, green, and blue is spun three times. There are 27 equally likely outcomes in the sample space. A favourable outcome is one where there is no green.

What is the probability of getting a favourable outcome?

A	$\frac{8}{27}$	B	$\frac{19}{27}$
C	$\frac{8}{19}$	D	$\frac{27}{8}$

5

A fair coin is flipped and a fair six-sided die is rolled. There are 12 equally likely outcomes in the sample space. A favourable outcome is one where the die shows a 6.

What is the probability of getting a favourable outcome?

A	$\frac{1}{5}$	B	$\frac{1}{6}$
C	$\frac{5}{6}$	D	$\frac{1}{4}$

6

A spinner with three equal-sized sections coloured red, green, and blue is spun twice. There are 9 equally likely outcomes in the sample space. A favourable outcome is one where there is at least one red.

What is the probability of getting a favourable outcome?

A	$\frac{5}{4}$	B	$\frac{5}{9}$
C	$\frac{4}{9}$	D	$\frac{9}{5}$

7

A fair six-sided die is rolled and a spinner with red, green, and blue sections is spun. There are 18 equally likely outcomes in the sample space. A favourable outcome is one where the die shows a 1.

What is the probability of getting a favourable outcome?

A	$\frac{1}{6}$	B	$\frac{1}{5}$
C	$\frac{5}{6}$	D	$\frac{2}{9}$

8

Two fair coins are flipped. There are 4 equally likely outcomes in the sample space. A favourable outcome is one where there is exactly one head.

What is the probability of getting a favourable outcome?

A	$\frac{3}{4}$	B	$\frac{2}{5}$
C	$\frac{1}{4}$	D	$\frac{1}{2}$