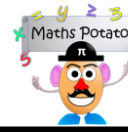




Calculating missing probabilities



Decimals and percentages

- The probability of it raining is 63%. What is the probability of it not raining?
- The table below shows the probabilities of picking different coloured counters from a bag.

Colour	Red	Blue	Purple	Green	Yellow
(P)	34%	25%	10%	8%	

- Fill in the missing probability
- What is the probability of picking a red or green?

- The table below shows the probabilities of picking different coloured counters from a bag.

Colour	Red	Blue	Purple	Green	Yellow
(P)	0.2	0.13	0.08	0.27	

- Fill in the missing probability
- What is the probability of picking a red or green?

- The table below shows the probabilities of picking different coloured counters from a bag. The probability of yellow is the same as blue

Colour	Red	Blue	Purple	Green	Yellow
(P)	0.12		0.4	0.24	

Fill in the missing probability

- The table below shows the probabilities of picking different coloured counters from a bag. Purple is twice as likely as yellow.

Colour	Red	Blue	Purple	Yellow
(P)	0.43	0.2		

Fill in the missing probabilities

Fractions

- Alan and Alice play a game of noughts and crosses. From looking at previous games, the probability of Alan winning is $\frac{3}{10}$, the probability Alice will win is $\frac{9}{20}$. What is the probability of a draw?

- The probability of a football team winning a match is $\frac{2}{3}$. The probability of the team losing is $\frac{1}{4}$. What is the probability of the team losing?

- The table below shows the probabilities of picking different coloured counters from a bag.

Colour	Red	Blue	Purple	Green
(P)	$\frac{1}{5}$	$\frac{3}{10}$		$\frac{7}{20}$

- Fill in the missing probability
- What is the probability of picking a red or green?

- The table below shows the probabilities of picking different coloured counters from a bag.

Colour	Red	Blue	Purple	Green
(P)	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{1}{4}$	

- Fill in the missing probability
- What is the probability of picking a red or green?

- The table below shows the probabilities of picking different coloured counters from a bag. The probability of picking purple is the same as green.

Colour	Red	Blue	Purple	Green
(P)	$\frac{7}{20}$	$\frac{1}{4}$		

Fill in the missing probabilities

Application

- A hotelier conducted a survey of guests staying at her hotel. The table shows some of the results of her survey.

Type of guest	Probability
Man	0.7
Women	0.3
American man	0.2
American Women	0.05
Vegetarian	0.3
Married	0.5

- A guest was chosen at random. From the table work out these probabilities:
 - The guest was American
 - The guest was unmarried
 - The guest was not a vegetarian
- Explain why it is not possible to work out from the table the probability of a guest being a married vegetarian.

A Spinner consists of an outer ring of coloured sectors and an inner circle of numbered sectors, as shown.



- The probability of getting 2 is $\frac{1}{4}$. The Probability of getting 1 or 3 are equal. What is the probability of getting a 3?
- The probability of getting blue is $\frac{1}{4}$. The probability of getting white is $\frac{1}{4}$. The probability of getting green is $\frac{3}{8}$. What is the probability of getting red?