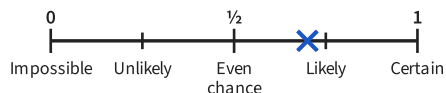


1 Single events

A bag holds 3 green and 7 yellow counters. One is taken at random.

- a) Find $P(\text{green})$.
b) Which word on the scale describes taking a yellow counter?



a) $\frac{3}{10}$ b) Likely

2 Probabilities that add to 1

A spinner lands on red, blue or green.

- a) Find $P(\text{green})$.
b) $P(\text{a seed grows}) = \frac{2}{5}$. Find $P(\text{the seed does not grow})$.

Colour	Red	Blue	Green
Probability	0.4	0.25	0.35

a) $1 - 0.65 = 0.35$

b) $1 - \frac{2}{5} = \frac{3}{5}$

3 Relative frequency

Jo spins a spinner 30 times.

- a) Find the relative frequency of blue.
b) Kay spins the same spinner 300 times. Whose results give the better estimate?

Colour	Red	Blue	Green
Frequency	9	15	6

a) $\frac{15}{30} = \frac{1}{2}$

b) Kay's, more spins

4 Expected outcomes

- a) The probability that a spinner lands on a star is $\frac{1}{4}$. It is spun 80 times. How many stars would you expect?
b) A fair dice is rolled 30 times. How many sixes would you expect?

a) $\frac{1}{4} \times 80 = 20$

b) $\frac{1}{6} \times 30 = 5$

5 Sample space diagrams

A fair coin is flipped and a fair spinner numbered 1 to 4 is spun.

- a) Complete the table of outcomes.
b) Find $P(\text{tails and an even number})$.

		Spinner			
Coin		1	2	3	4
	H	H1	H2	H3	H4
	T	T1	T2	T3	T4

b) $\frac{2}{8} = \frac{1}{4}$

Probability

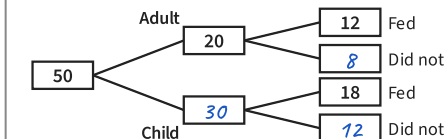
revision mat answers

Foundation B

6 Frequency trees

50 people visited a farm. Some of them fed the goats.

- a) Complete the frequency tree.
b) Find $P(\text{a child who fed the goats})$.



b) $\frac{18}{50} = \frac{9}{25}$

7 Two way tables

30 students each chose a drink.

- a) Complete the table.
b) A student is picked at random. Find $P(\text{girl who chose juice})$.

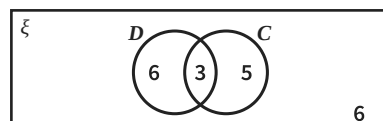
	Juice	Water	Total
Boys	8	7	15
Girls	9	6	15
Total	17	13	30

b) $\frac{9}{30} = \frac{3}{10}$

8 Venn diagrams

The Venn diagram shows 20 pupils.
D: has a dog. C: has a cat.

- a) Find $P(D \cap C)$.
b) Find $P(D')$.



a) $\frac{3}{20}$ b) $5 + 6 = 11, \frac{11}{20}$

9 The AND and OR rules

- a) A fair dice is rolled. Find $P(2 \text{ or } 5)$.
b) A fair coin is flipped twice. Find $P(\text{heads both times})$.

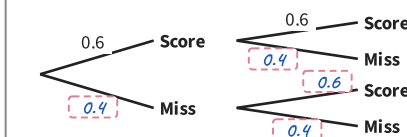
a) $\frac{1}{6} + \frac{1}{6} = \frac{1}{3}$

b) $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

10 Tree diagrams

Kim takes two penalties. Each time, $P(\text{she scores}) = 0.6$

- a) Complete the tree diagram.
b) Find $P(\text{she scores both times})$.



b) $0.6 \times 0.6 = 0.36$