

Are you Ready?

Converting fractions to decimals

1 Convert the following fractions to decimals.

a $\frac{1}{5}$

b $\frac{3}{4}$

c $\frac{3}{10}$

d $\frac{17}{20}$

Converting decimals to percentages

2 Convert each of the following decimals to percentages.

a 0.3

b 0.65

c 0.04

d 0.125

Simplifying fractions

3 Simplify each of the following fractions.

a $\frac{5}{20}$

b $\frac{28}{32}$

c $\frac{160}{200}$

d $\frac{18}{50}$

Converting fractions to percentages

4 Write each of the following fractions as percentages.

a $\frac{1}{4}$

b $\frac{3}{5}$

c $\frac{5}{8}$

d $\frac{1}{3}$

Probability scale

5 For each of the following events, specify whether the chance of the event occurring is certain, fifty-fifty or impossible.

a Two dice are rolled and a total of 14 is obtained.

b A coin is tossed and it lands on Tails.

c The month of July will follow June.

d The maximum temperature on a summer's day in Sydney will be less than 0°C .

e A fair die is rolled and a number less than 4 is obtained.

Theoretical probability

6 In a box of chocolates, there are 6 soft-centred chocolates, 4 hard-centred chocolates and 5 nut-centred chocolates. A chocolate is selected at random.

a What is the probability of selecting a hard-centred chocolate?

b What is the probability of selecting a soft-centred chocolate?

c What is the probability of selecting a nut-centred chocolate?

d What is the sum of the probabilities calculated in parts **a**, **b** and **c**?