A charity sends an appeal letter to 3000 people.

The letter asks for a donation of money.

Here is some information about the last appeal letter the charity sent out.

 $\frac{1}{2}$  of the people who were sent the letter made a donation.

The average donation was £8.60

 $\frac{1}{3}$  of the people who made a donation filled in a tax form.

The government adds 25% to the donations of these people.

Using this information,

work out the amount the charity can expect to receive from this appeal.

At the safari park Mrs Lawson sees this offer.

## **Special Offer**

 $\frac{1}{3}$  off the cost of all photographs today

The normal price of a photograph is £12.60

How much is the cost of a photograph with this special offer? Show a check of your answer.

There is a special offer for adults who buy tickets before the day of the festival.

## Village festival

Adult ticket £8.50 on the day

Buy early pay  $\frac{3}{5}$  of this price

(d) How much is an adult ticket if you buy early?

Bradley goes on a 25 km bike ride each week.

He wants to monitor his recovery heart rate.

Bradley records his recovery heart rate 10 minutes after each bike ride.

He has this information.

	Recovery heart rate (bpm)
ride 1	162
ride 7	135

Bradley thinks his recovery heart rate from ride 1 to ride 7 has decreased by  $\frac{1}{5}$ .

(b) Has his recovery heart rate decreased by  $\frac{1}{5}$ ?

A car factory is going to make four different car models **A**, **B**, **C** and **D**.

80 people are asked which of the four models they would be most likely to buy.

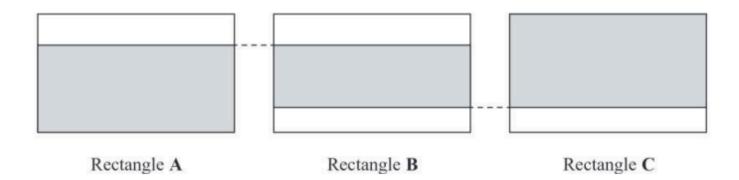
The table shows information about the results.

Car model	Number of people
A	23
В	15
C	30
D	12

The factory is going to make 40 000 cars next year.

Work out how many model B cars the factory should make next year.

0 The diagram shows three identical rectangles A, B and C.



 $\frac{5}{8}$  of rectangle **A** is shaded.

 $\frac{9}{11}$  of rectangle C is shaded.

Work out the fraction of rectangle B that is shaded.

There are 400 counters in a box.

The counters are red or yellow or green.

 $\frac{3}{8}$  of the counters are red.

82 of the counters are yellow.

What percentage of the counters are green?

 $\frac{3}{8}$  of the members of a squash club are children.

 $\frac{5}{6}$  of these children are right-handed.

What fraction of the members of the squash club are right-handed children? Give your answer as a fraction in its simplest form. Show your working clearly.

Mairi has 200 flowers.

Of these flowers

37 are white

25 are yellow

42 are pink

The rest of the flowers are red.

Express the number of red flowers as a fraction of the total number of flowers. Give your fraction in its simplest form.

Asif has 200 beads.

Asif gives  $\frac{1}{4}$  of the 200 beads to Bernadette.

Asif gives  $\frac{2}{5}$  of the 200 beads to Claudio.

Asif gives 43 beads to Derek.

What fraction of the 200 beads does Asif have left?