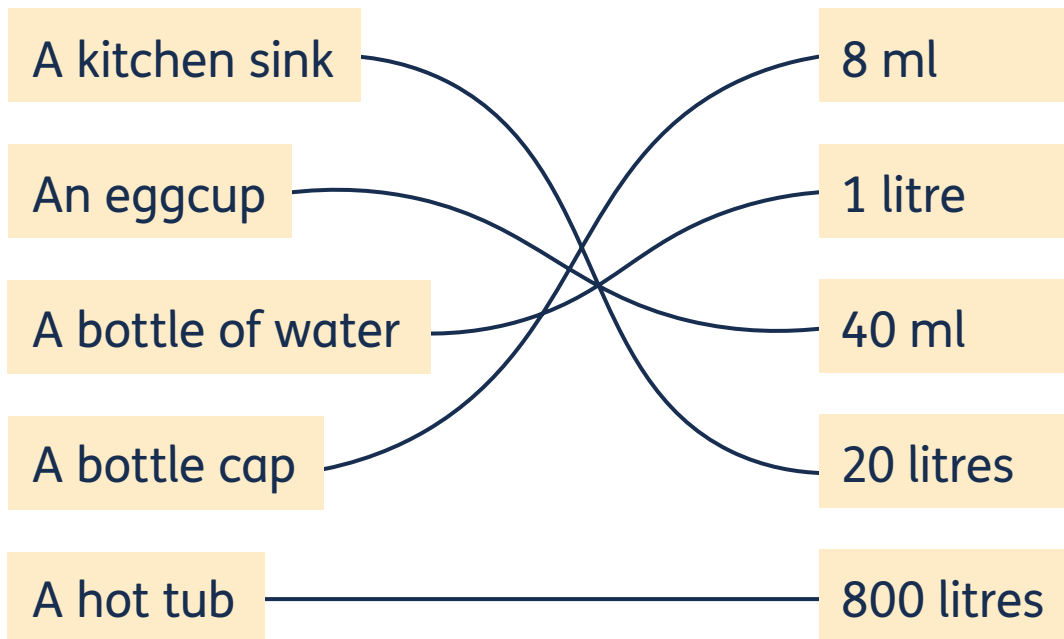


# Capacity and statistics

Answer sheet

## Question 1

Can you match these objects with their capacity?



## Question 2

Can you compare these volumes? Use  $<$ ,  $>$ , or  $=$ .

400 ml	$<$	4 litres
2,000 ml	$<$	3 litres
1,199 ml	$>$	1 litre
12 litres	$>$	1,200 ml
360 ml of water	$=$	360 ml of fizzy pop



# Capacity and statistics

Answer sheet

## Question 3

Can you complete these additions and subtractions?

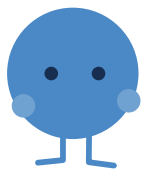
**a**  $75 \text{ ml} + 25 \text{ ml} = 100 \text{ ml}$       **b**  $3 \text{ litres} + 24 \text{ litres} = 27 \text{ litres}$

**c**  $22 \text{ ml} + 122 \text{ ml} = 144 \text{ ml}$       **d**  $447 \text{ ml} + 63 \text{ ml} = 510 \text{ ml}$

**e**  $100 \text{ ml} - 26 \text{ ml} = 74 \text{ ml}$       **f**  $35 \text{ litres} - 27 \text{ litres} = 8 \text{ litres}$

**g**  $456 \text{ ml} - 134 \text{ ml} = 322 \text{ ml}$       **h**  $125 \text{ litres} - 52 \text{ litres} = 73 \text{ litres}$

## Question 4

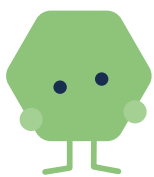


At the restaurant, Prakash has three 300 ml cups of water from a 1,000 ml bottle. What volume of water is left in the bottle?

$$3 \times 300 \text{ ml} = 900 \text{ ml}$$

$$1,000 \text{ ml} - 900 \text{ ml} = 100 \text{ ml}$$

There is 100 ml left in the bottle



Maya's fruit drink recipe uses 50 ml of passion fruit syrup, 500 ml of orange juice, and 200 ml of mango juice. How much fruit drink does the recipe make?

$$50 \text{ ml} + 500 \text{ ml} + 200 \text{ ml} =$$

$$700 \text{ ml} + 50 \text{ ml} = 750 \text{ ml}$$

The recipe makes 750 ml of fruit drink







# Capacity and statistics

Answer sheet

## Question 5

Darren asks everyone in the lunch queue whether they're having soup, salad or a sandwich for lunch. He puts his answers in this pictogram.

Lunch choices	Frequency
Soup	
Salad	
Sandwich	

Key:  = 4 people

**a** What's the most popular lunch choice?

Sandwich

**b** What's the least popular?

Salad

**c** How many people are having sandwiches?

18



# Capacity and statistics

## Answer sheet

- d** Darren forgot to add his own choice. He is having soup. Can you add Darren to the pictogram?
- e** Including Darren, how many people are there in the lunch queue altogether?

$$\text{Salad} = 2 \times 4 = 8$$

$$\text{Soup} = (3 \times 4) + 1 = 13$$

$$\text{Sandwiches: } (4 \times 4) + 2 = 18$$

$$18 + 8 + 13 = 39$$

There are 39 people in the lunch queue

### Question 6

Maisie asks everyone in her class, “Which superpower would you rather have?”

Here are the results in a frequency table.












Superpower	Frequency
Flying	12
Invisibility	5
Super speed	3




# Capacity and statistics

Answer sheet

- a** Can you complete a pictogram with Maisie's results?

Superpower	Frequency					
Flying						
Invisibility						
Super speed						

Key:  = 2 people

- b** How many people did Maisie ask altogether?

20 people

- c** Maisie says, "Twice as many people chose flying over being invisible." Is she right?

No. 5 people chose invisibility. If twice as many people chose flying, that would be 10 people.

We know from the table that 12 people chose flying. This is more than twice as many.



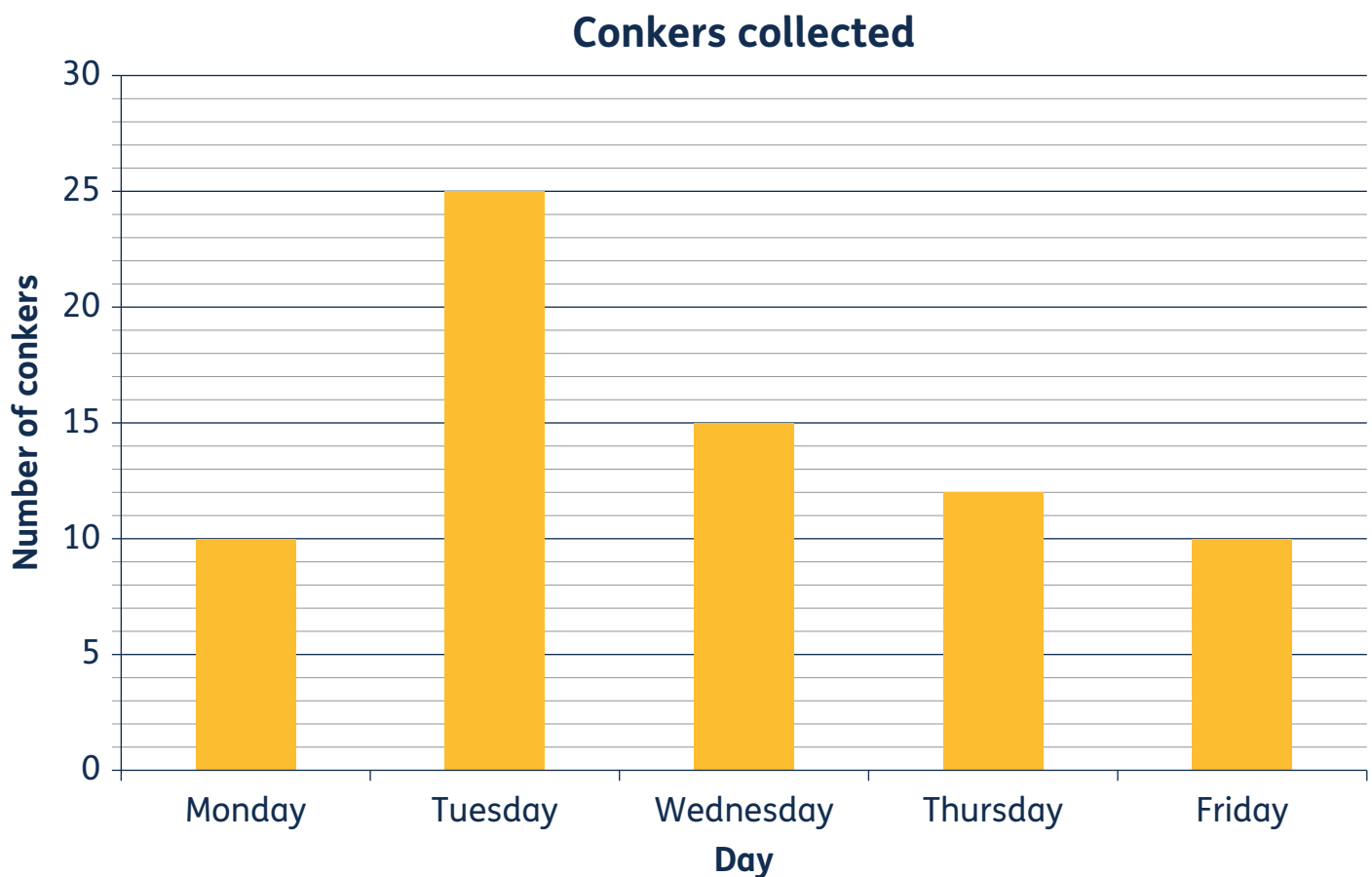
# Capacity and statistics

Answer sheet

## Question 8

Jade decides to pick up conkers on her walk to school.

Here is a bar chart she makes showing how many conkers she collects each day.



**a** How many conkers did Jade collect on Thursday?

12



# Capacity and statistics

Answer sheet

- b** On which two days did Jade collect the same number of conkers?

Monday and Friday

- c** How many more conkers did Jade collect on Tuesday than on Wednesday?

10

- d** How many conkers did Jade collect all together?

$$10 + 25 + 15 + 12 + 10 = 72$$

- e** There is no data for Saturday and Sunday. Why not?

e.g. Jade doesn't go to school at the weekend.



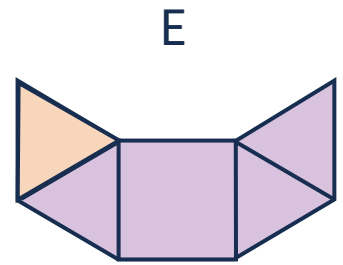
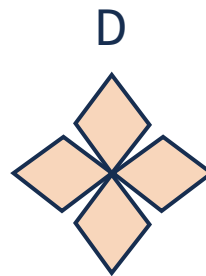
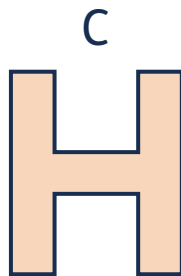
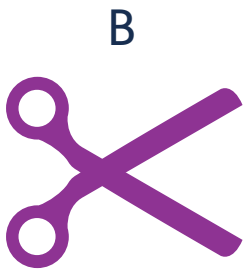
# Symmetry, reflection and position

Answer sheet

You will need a ruler for this worksheet.

## Question 1

Here are some shapes.



Which of these shapes have two or more lines of symmetry?

C and D

Which shapes have only one line of symmetry?

A and B

Which shapes have no lines of symmetry?

E

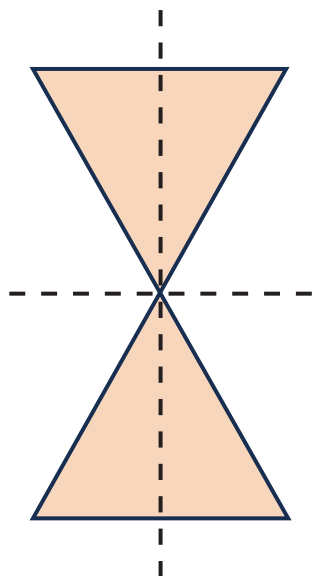
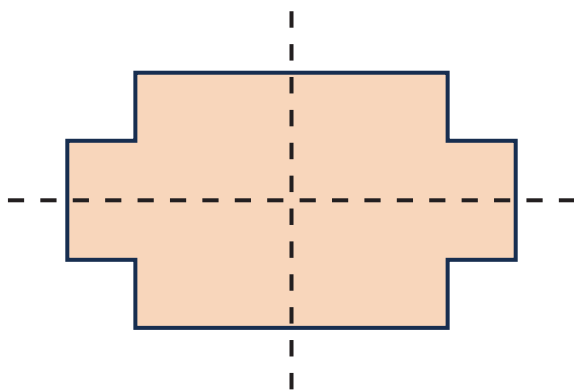
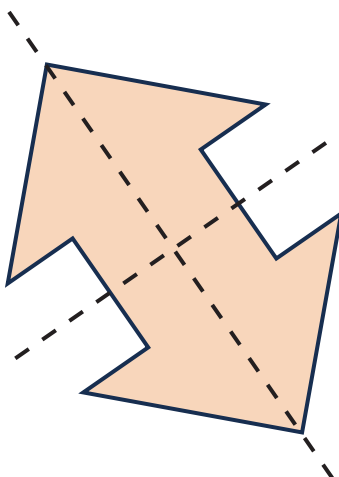


# Symmetry, reflection and position

Answer sheet

## Question 2

Can you draw two lines of symmetry on these shapes?

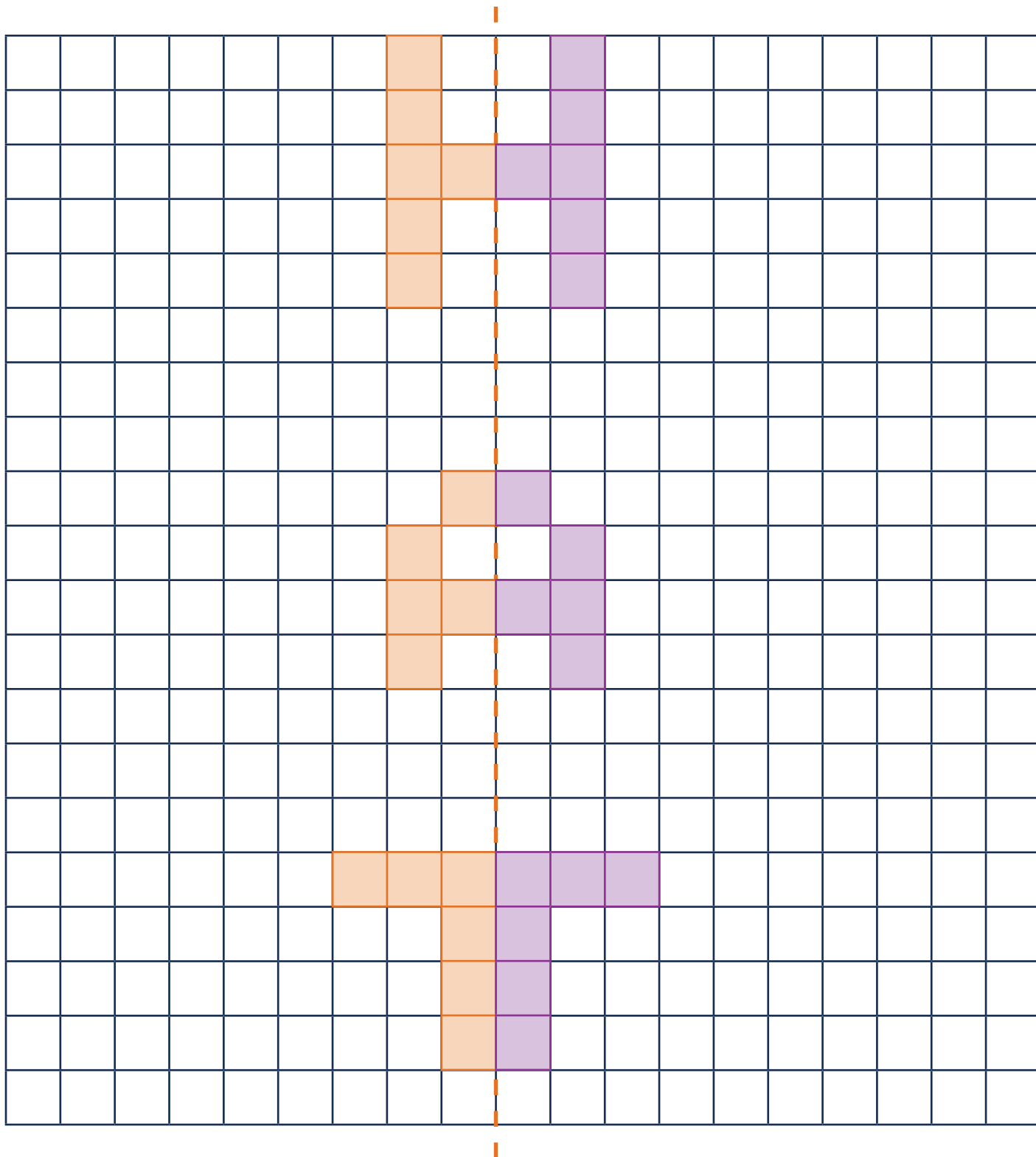
**a****b****c**

# Symmetry, reflection and position

Answer sheet

## Question 3

Can you complete these patterns by reflecting them in the mirror line?



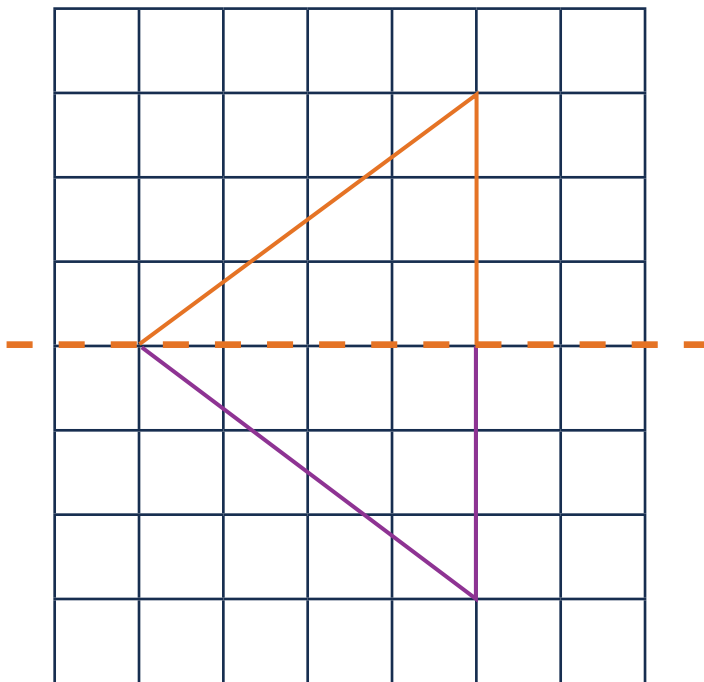
# Symmetry, reflection and position

Answer sheet

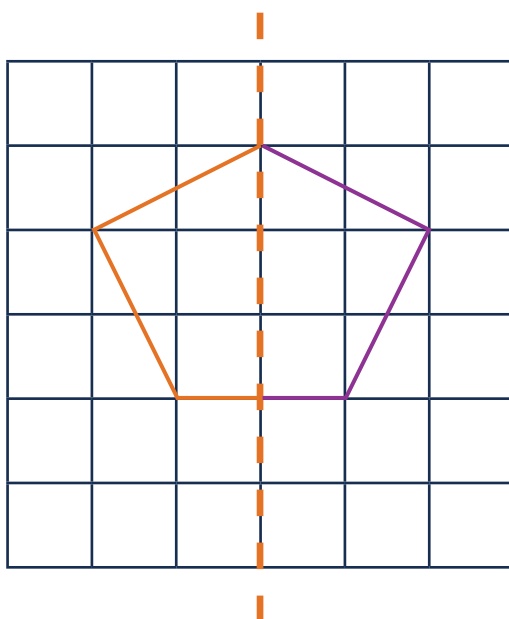
## Question 4

Draw a mirror line and complete the shapes to make:

**a** a triangle



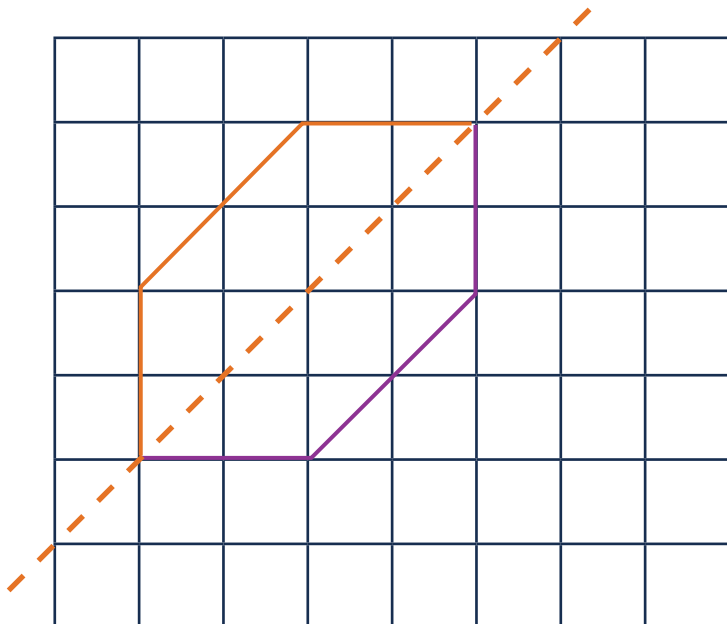
**b** a pentagon



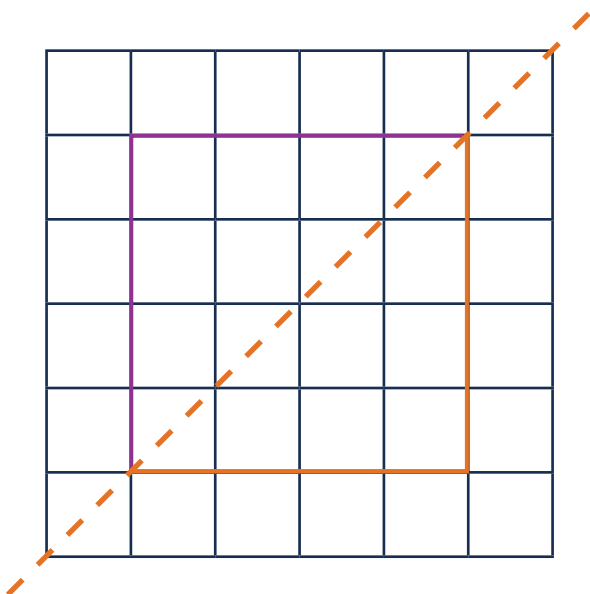
# Symmetry, reflection and position

Answer sheet

c a hexagon



d a square

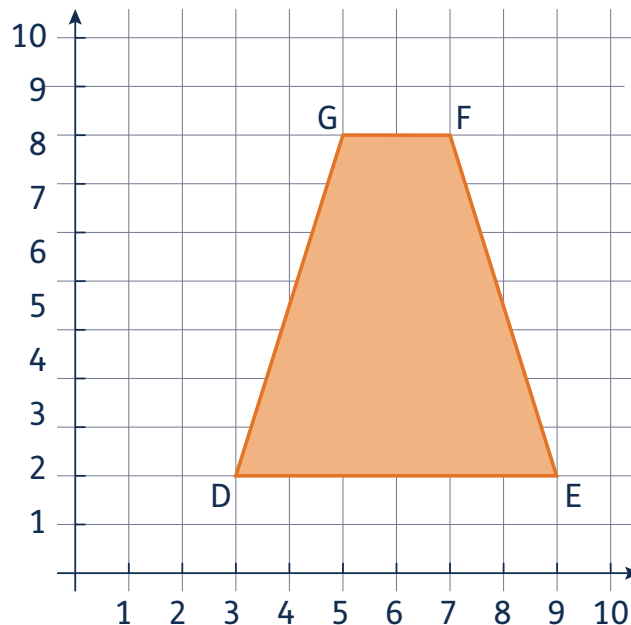


# Symmetry, reflection and position

Answer sheet

## Question 5

Here is a trapezium on a grid. It is called DEFG.



Can you find the coordinates of the shape?

D: (  ,  )E: (  ,  )F: (  ,  )G: (  ,  )

What are the coordinates of:

the far top right of the grid?

(  ,  )

the top of the y-axis?

(  ,  )

the far right-hand end of the x-axis?

(  ,  )

# Symmetry, reflection and position

Answer sheet

## Question 6

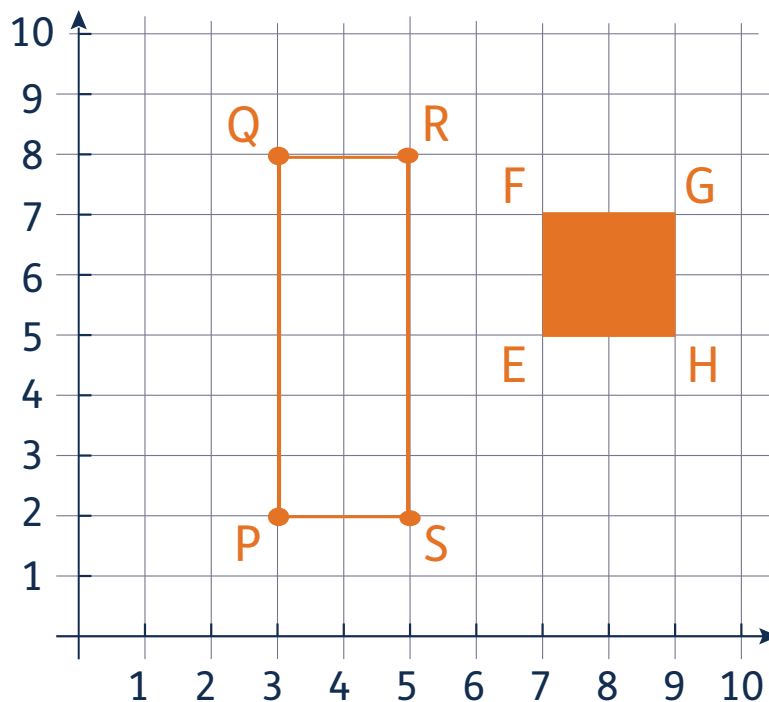
**a** Can you draw the following points on the grid below?

P (3,2)

Q (3,8)

R (5,8)

S (5,2)



**b** Join the points together. What shape have you drawn?

oblong/rectangle

**c** What are the coordinates of a point halfway between:

 P and Q? ( 3 , 5 )

 Q and R? ( 4 , 8 )

 P and S? ( 4 , 2 )


# Symmetry, reflection and position

Answer sheet

- d** Draw a square on the same grid that is 2 squares by 2 squares. Label its vertices EFGH.
- e** What are the coordinates of your square? Answers vary  
e.g. see grid

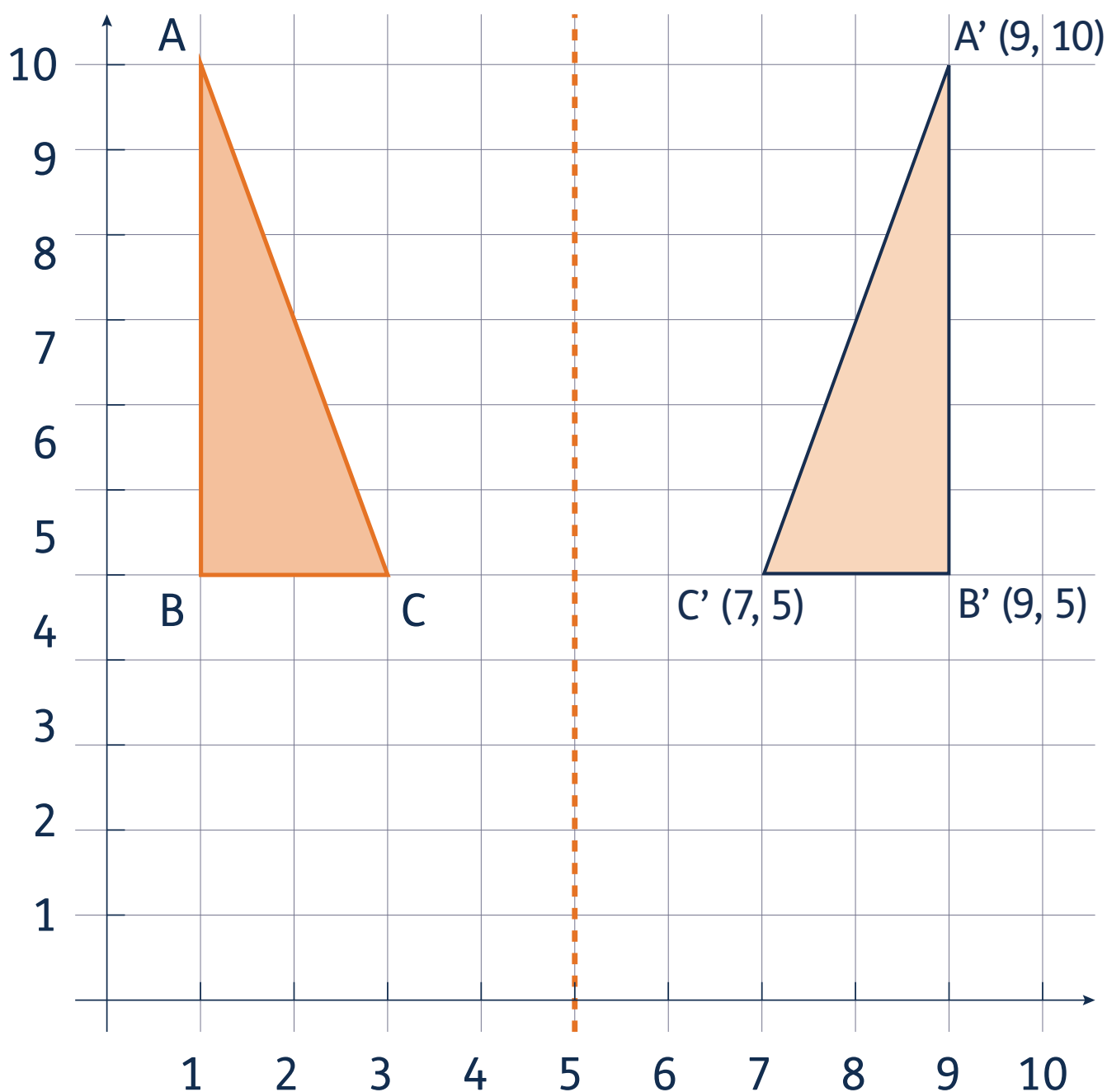
E: (  ,  )F: (  ,  )G: (  ,  )H: (  ,  )

# Symmetry, reflection and position

Answer sheet

## Question 7

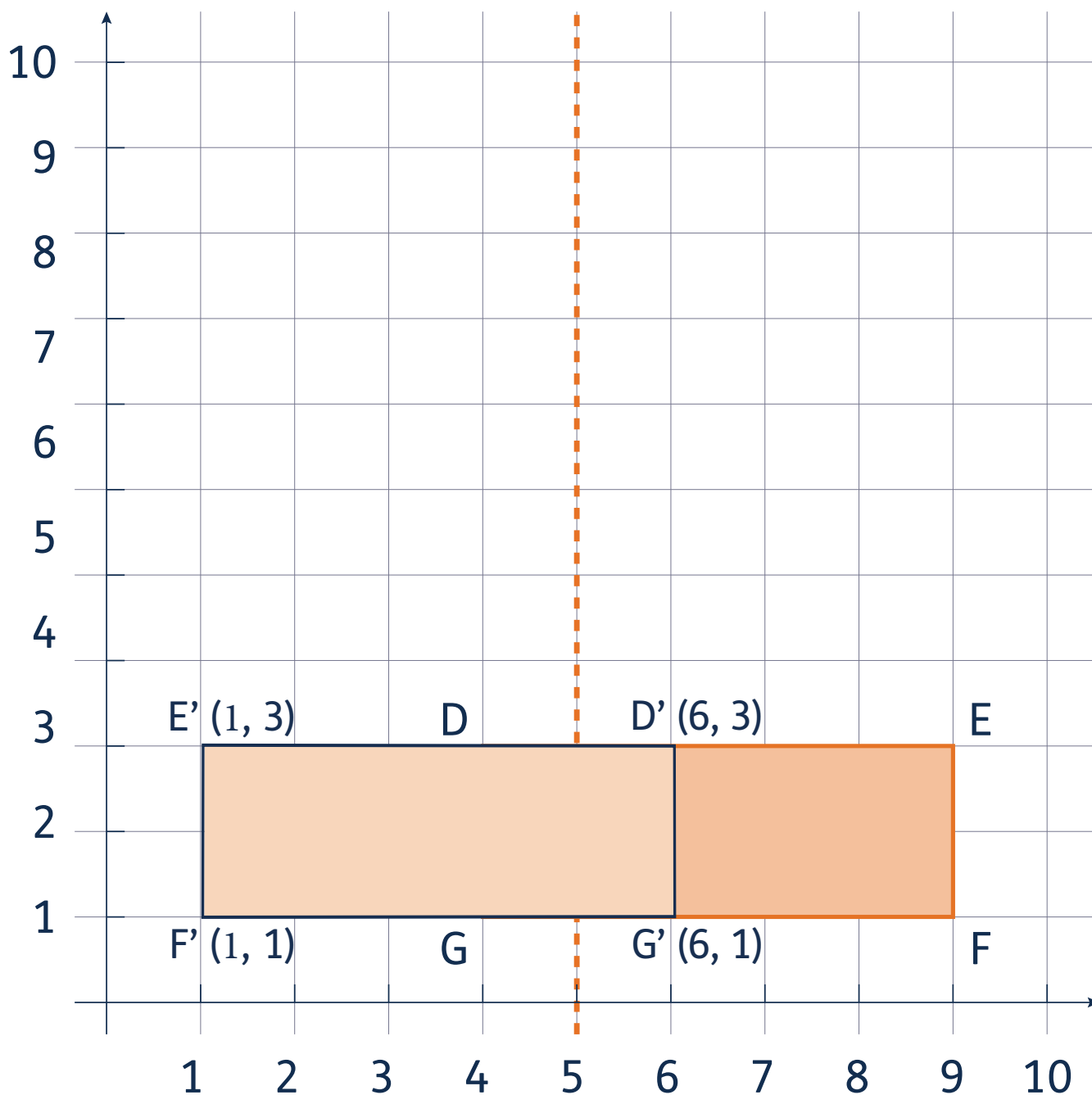
Work out the new coordinates when these shapes are reflected in the mirror line. Draw the new shape and write the new coordinates.

**a**



# Symmetry, reflection and position

Answer sheet

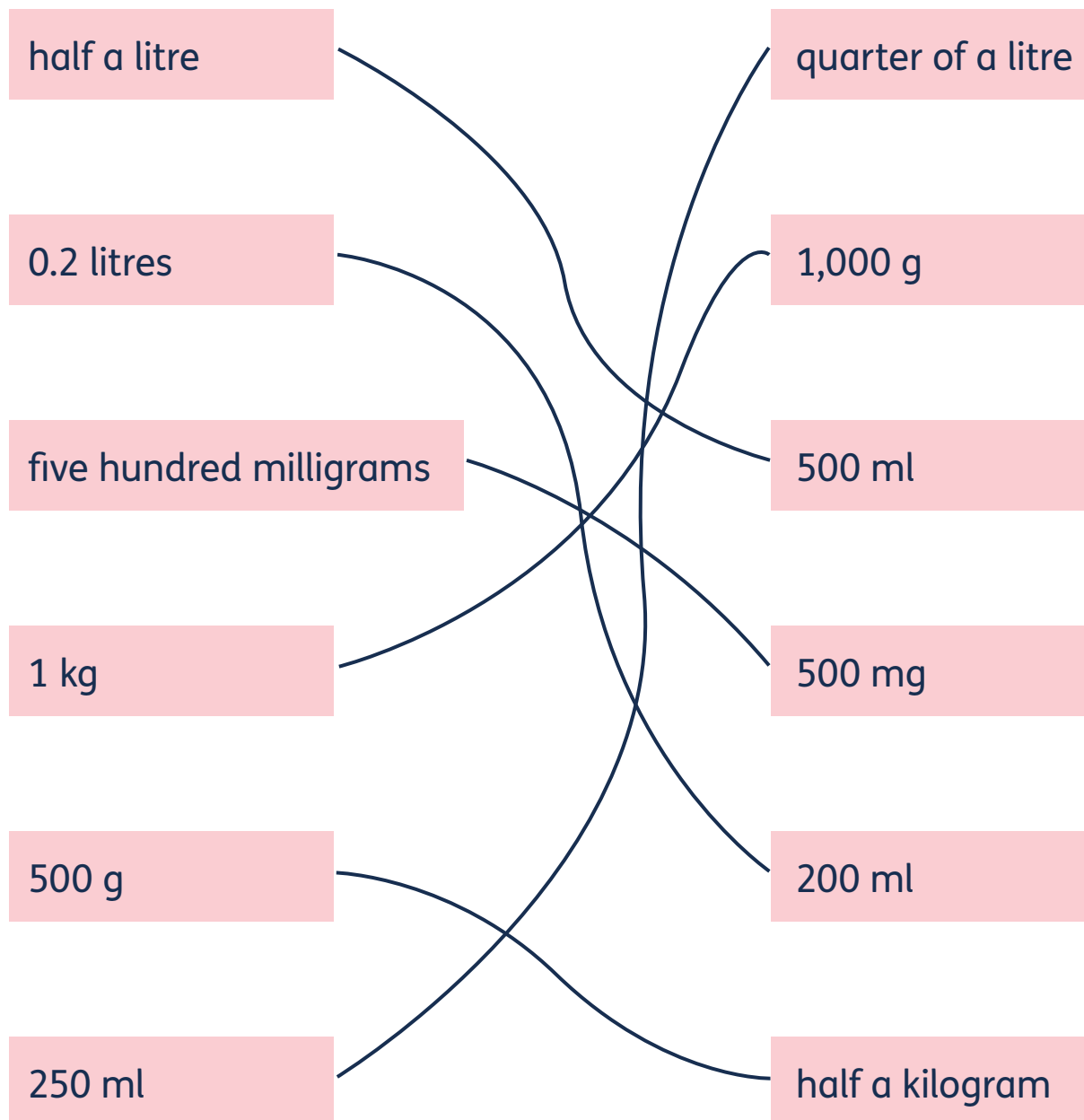
**b**

# Measures, time and timetables

Answer sheet

## Question 1

Can you match the equivalent measures together?



# Measures, time and timetables

Answer sheet

## Question 2

Can you complete these number sentences?

**a**  $500 \text{ m} =$    $\text{ km}$     **b**  $346 \text{ ml} =$    $\text{ litres}$

**c**  $1304 \text{ m} =$    $\text{ km}$     **d**  $25 \text{ litres} =$    $\text{ ml}$

**e**  $5.23 \text{ kg} =$    $\text{ g}$     **f**  $0.01 \text{ kg} =$    $\text{ g}$

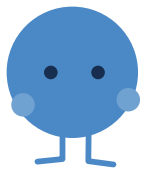
**g**  $5 \text{ g} =$    $\text{ mg}$     **h**  $7000 \text{ mg} =$    $\text{ kg}$



# Measures, time and timetables

Answer sheet

## Question 3



Tabitha is pouring squash from a 2.5 litre bottle into 300 ml cups.

How many full cups of squash can she get from the bottle?

$$2.5 \text{ litres} = 2,500 \text{ ml}$$

$$2,500 \text{ ml} \div 300 \text{ ml} = 8 \text{ r } 100 \text{ ml}$$

8 full cups



Rohan is using a 5 metre roll of string to tie round five presents. Each present needs 82 cm of string. How much string does he have left over?

$$5 \times 82 \text{ cm} = 410 \text{ cm}$$

$$500 \text{ cm} - 410 \text{ cm} = 90 \text{ cm}$$

90 cm left



Isla is  $\frac{3}{8}$  of the way around a 4 km walk. How many metres has she gone so far?

$$4 \text{ km} = 4,000 \text{ m}$$

$$4,000 \text{ m} \div 8 = 500 \text{ m}$$

$$500 \text{ m} \times 3 = 1,500 \text{ m}$$

1,500 metres



# Measures, time and timetables

Answer sheet

## Question 4

Circle the best estimate for these conversions. Use the conversion keys to help you.

1 pound  $\approx$  500 g  
1 kg  $\approx$  2.2 pounds

1 inch  $\approx$  2.5 cm

1 mile  $\approx$  1.6 km  
5 miles  $\approx$  2.2 pounds

A car drives for 6 miles. This is approximately:

- ☒ a 10 kilometres      ☐ b 12 kilometres      ☐ c 4 kilometres

A train travels at 80 kilometres an hour. This is approximately:

- ☒ a 50 miles per hour      ☐ b 55 miles per hour      ☐ c 45 miles per hour

A ruler is 30 centimetres long. This is approximately:

- ☐ a 15 inches      ☐ b 75 inches      ☒ c 12 inches

Plants are sown 6 inches apart. This is approximately:

- ☒ a 15 cm      ☐ b 2.4 cm      ☐ c 12 cm

Matt's cat weighs 3 kilograms. This is approximately:

- ☒ a 7 pounds      ☐ b 2 pounds      ☐ c 8 pounds

A cake needs 2 pounds of flour. This is approximately:

- ☒ a 1000 grams      ☐ b 500 grams      ☐ c 500 kilograms



# Measures, time and timetables

Answer sheet

## Question 5

Can you convert these times?

**a** 120 seconds =  minutes

**b** 183 seconds =  minutes and  seconds

**c** 177 seconds =  minutes and  seconds

**d** 0.25 hours =  minutes

**e** 3.5 hours =  minutes

**f** 0.1 hours =  seconds

**g** 75 minutes =  hours

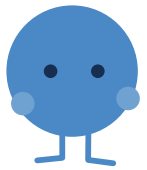
**h** 450 minutes =  hours



# Measures, time and timetables

Answer sheet

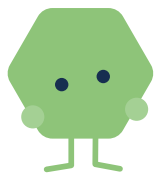
## Question 6



Finn starts watching a film at 6pm. The film is 123 minutes long. What time will Finn's film finish?

2 hours and three minutes later

8:03 pm



The journey by train from London to Rome takes 18 hours. If I set off at 10pm on Thursday night, when will I arrive in Rome?

12 hours later = 10am on Friday

+ 6 more hours =  
4pm on Friday



The school morning timetable starts at 9am. There are 10 minutes of registration, three 45-minute lessons and a 15 minute break. What time does lunch start?

$15 + 45 + 45 + 45 + 30 =$   
180 minutes = 3 hours

9am + 3 hours = 12pm  
12 pm



# Measures, time and timetables

Answer sheet

## Question 6

Rasheed is looking at a bus timetable.

<b>Ash Gate</b>	06:53	08:42	10:31	12:24
<b>Broad Hill</b>	07:13	09:00	10:52	12:44
<b>Coletown</b>	07:26	09:14	11:04	12:58
<b>Down Vale</b>	07:50	09:35	11:27	13:19

- a** How long does the first bus of the day take to travel from:

Ash Gate to Coletown?

33 minutes

Ash Gate to Down Vale?

57 minutes

- b** What time does the quickest bus journey of the day leave Ash Gate?

08:42 (fastest journey = 53 minutes)

- c** The 12:24 bus from Ash Gate is running 35 minutes late. What time will it arrive in Broad Hill?

13:19

- d** What's the latest bus Rasheed can catch from Broad Hill if he wants to arrive in Down Vale by 12pm?

10:52





# Measures, time and timetables

Answer sheet

- e** There is a return bus in the afternoon.

This bus takes exactly 18 minutes between each stop. Fill in the timetable to show when it stops at Down Vale and Ash Gate.

<b>Down Vale</b>	<u>17:34</u>
<b>Coletown</b>	17:52
<b>Broad Hill</b>	18:10
<b>Ash Gate</b>	<u>18:28</u>

- f** Is this bus faster than the outward journeys?

No. Journey =  $18 \times 3 = 54$  minutes. The 08:42 is faster (53 minutes)



# Nets, circles and statistics

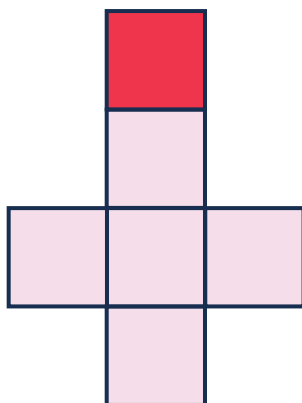
Answer sheet

## Question 1

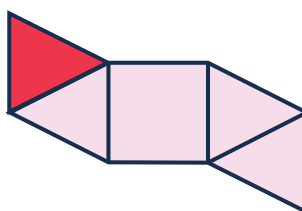
Here are some unfinished nets.

Add one face to make a net that can be folded to make:

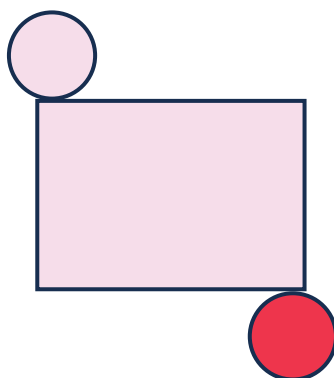
**a** a cube



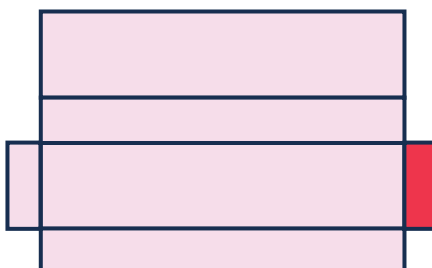
**b** a square-based pyramid



**c** a cylinder



**d** a cuboid



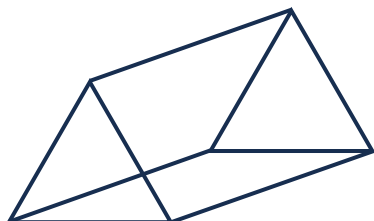
# Nets, circles and statistics

Answer sheet

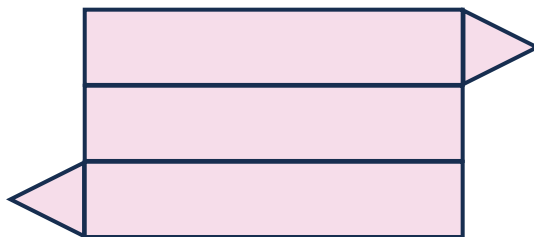
## Question 2

Can you draw a net for each of these shapes?

a



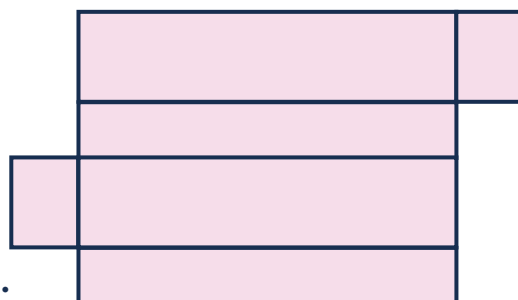
e.g.



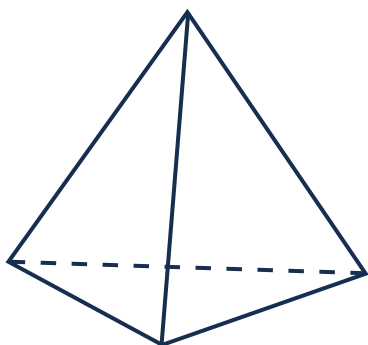
b



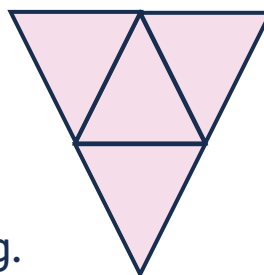
e.g.



c



e.g.

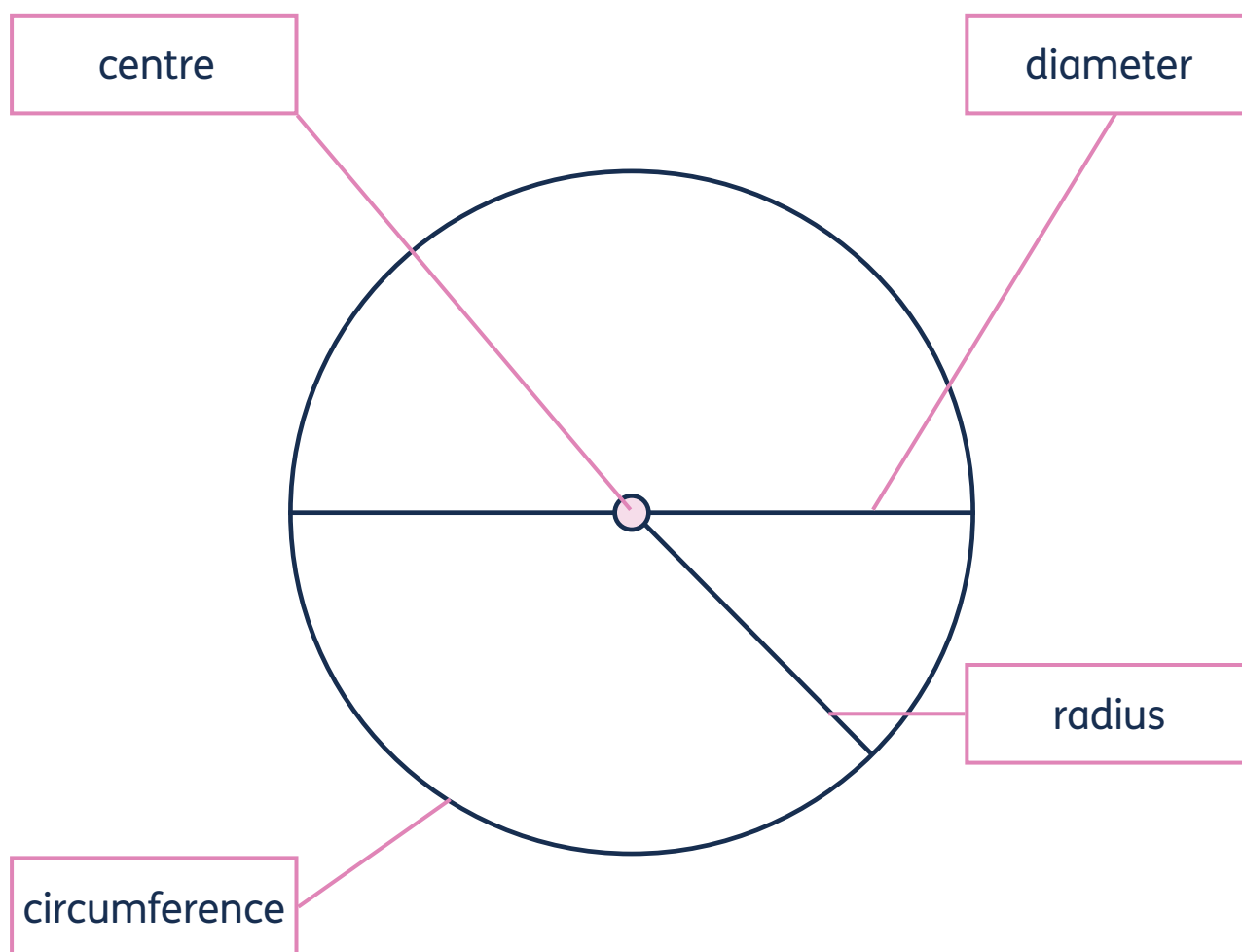


# Nets, circles and statistics

Answer sheet

## Question 3

Can you label the parts of the circle?



radius      diameter      circumference      centre



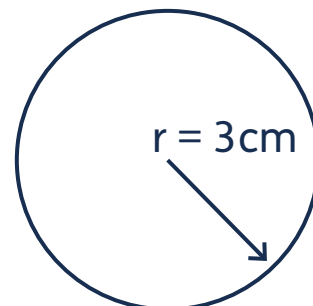
# Nets, circles and statistics

## Answer sheet

### Question 4

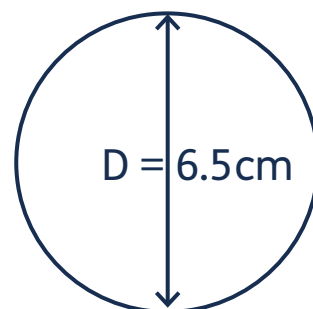
This circle has a radius of 3 cm. What is its diameter?

6 cm



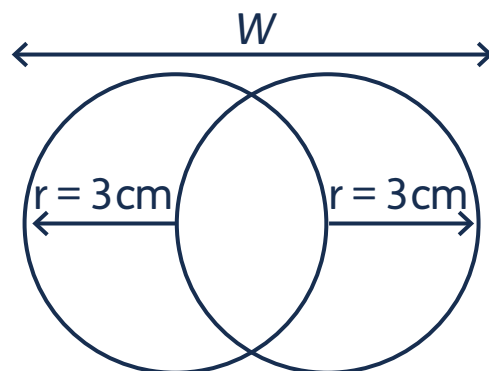
This circle has a diameter of 6.5. What is its radius?

3.25 cm



These circles have the same radius of 3cm.  
What is the width of  $W$ ?

9 cm

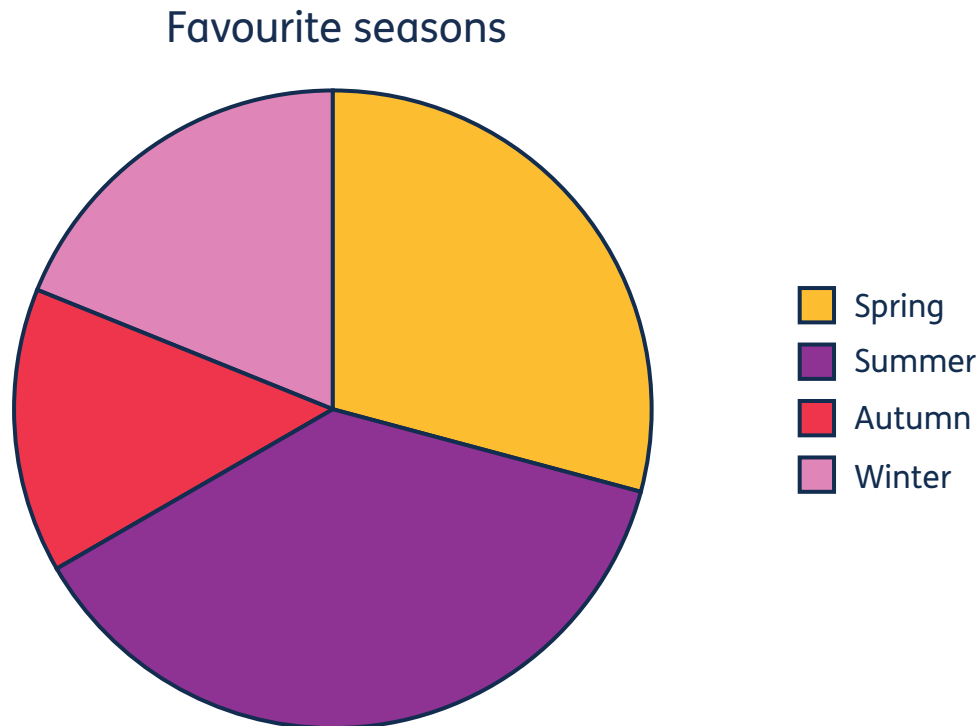


# Nets, circles and statistics

Answer sheet

## Question 5

48 people were asked, 'What is your favourite season?' This pie chart shows the results.



- a** 14 people like spring best, which is  $105^\circ$  on the pie chart. How many degrees represent 1 person?

$$360^\circ \div 48 = 7.5^\circ$$

- b** 18 people said they preferred summer. What angle is summer on the pie chart?

$$7.5^\circ \times 18 = 135^\circ$$



# Nets, circles and statistics

## Answer sheet

- c Autumn measures  $52.5^\circ$  and winter measures  $67.5^\circ$ . How many more people preferred winter to autumn?

$$52.5 \div 7.5 = 7$$

$$67.5 \div 7.5 = 9$$

$$9 - 7 = 2$$

2 people

- d 6 people changed their mind. They now want to pick autumn instead of summer. How big are autumn and summer on the pie chart now?

Summer

$$18 - 6 = 12$$

$$12 \times 7.5 = 90^\circ$$

Autumn

$$6 \times 7.5 = 45^\circ$$

$$52.5^\circ + 45^\circ = 97.5^\circ$$



# Nets, circles and statistics

Answer sheet

## Question 6

Daisy sold 100 fruit lollies at the park.

Flavour of ice lolly	Number sold
Raspberry	32
Banana	14
Mango	11
Strawberry	34
Pineapple	18

She turns this into a pie chart. Can you fill in the missing labels for pineapple, mango and banana?

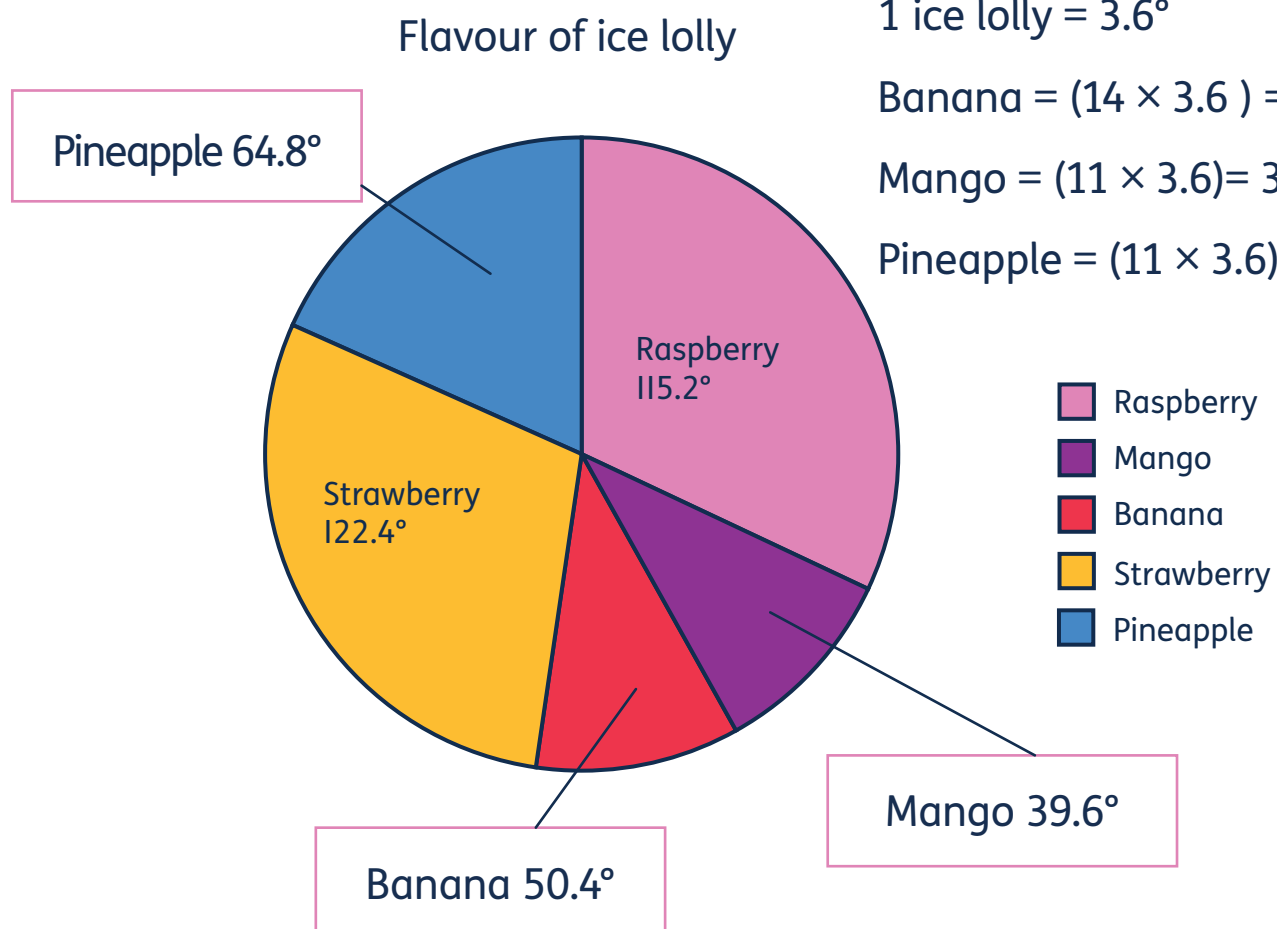
$$360^\circ \div 100 = 3.6$$

$$1 \text{ ice lolly} = 3.6^\circ$$

$$\text{Banana} = (14 \times 3.6) = 50.4^\circ$$

$$\text{Mango} = (11 \times 3.6) = 39.6^\circ$$

$$\text{Pineapple} = (18 \times 3.6) = 64.8^\circ$$





# Nets, circles and statistics

Answer sheet

## Question 7

Can you work out the mean average of each set of numbers?

- a** 14, 26, 18, 12, 21, 19, 16

18

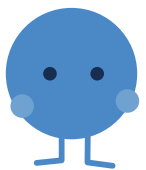
- b** 9.5, 9.25, 10, 7.25, 3, 12

8.5

- c** 1000, 1001, 1004, 1003, 996, 1011, 1013, 1004

1004

## Question 8



Can you write down four different numbers that have a mean average of 12?

any four numbers that add to 48.

e.g. 10, 12, 11, 15



Jamal says that the mean average number of people in a class in his year is 28. The other three classes have 32, 30, and 25 people. How many people does his class have?

$$28 \times 4 = 112$$

$$32 + 30 + 25 + ? = 112$$

25

