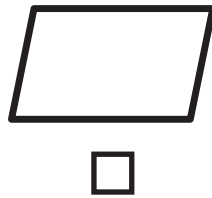


Big Maths Beat That!: Teacher Notes

SAFE Challenge 14			
	Step Location in the SAFE framework		Title of Step
	Progress Drive	Step No.	
Q1	Shape: 2D Shapes	22	I know 'The Quadrilateral Family'
Q2	Shape: Position & Direction	15	I can provide coordinates for a given point
Q3	Shape: Position & Direction	17	I can use x and y coordinates to find points
Q4	Amounts: Amounts of Temperature	9	I can read negative temperatures
Q5	Fractions: Fractions: Counting	12	I can round numbers with 1dp
Q6	Fractions: Fractions: Learn Its	6	I know all of my tables as fractions Learn Its
Q7	Fractions: Fractions: It's Nothing New	6	I can multiply unit fractions (within 1)
Q8	Fractions: Fractions: Calculation	5	I can simplify a fraction using my tables
Q9	Explaining Data: Bar Charts	10	I can find how many more (or fewer) than a given value shown on the horizontal axis (with continuous data)
Q10	Explaining Data: Line Graphs	3	I can explain a range of simple line graphs

1 Tick the quadrilateral that is a parallelogram



5 Round to the nearest whole number:

3.4 →

6 $\frac{1}{7}$ of 56 =

$\frac{1}{4}$ of 32 =

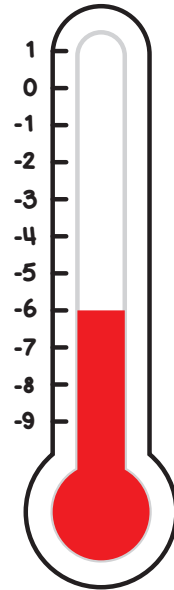
$\frac{1}{6}$ of 48 =

7 $8 \times \frac{1}{9} =$

8 Simplify:

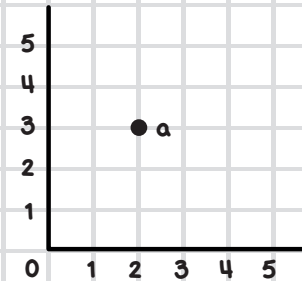
$\frac{10}{40} =$

4 °C



Temperature °C

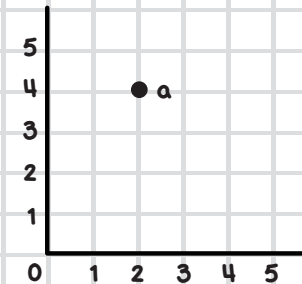
2



Write down the co-ordinates for point a

A = (,)

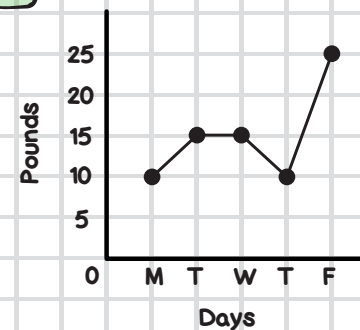
3



What is the y co-ordinate of point a?

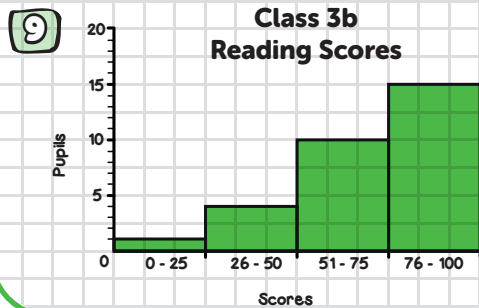
y =

10



A school tuck shop recorded its sales over one week.

How much money did the sales produce on Wednesday?



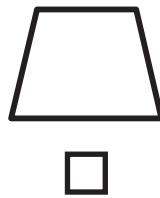
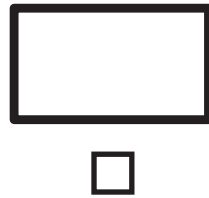
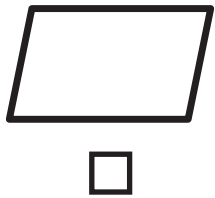
How many pupils scored more than 75 marks?

MY LAST SCORE?!

HAVE I BEAT THAT?!



1 Tick the quadrilateral that is a trapezium



5 Round to the nearest whole number:

6.2 →

6 $\frac{1}{7}$ of 56 =

$\frac{1}{4}$ of 32 =

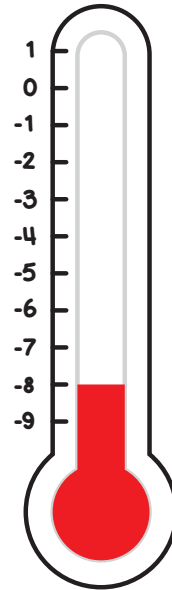
$\frac{1}{6}$ of 48 =

7 $4 \times \frac{1}{6} =$

8 Simplify:

$\frac{5}{20} =$

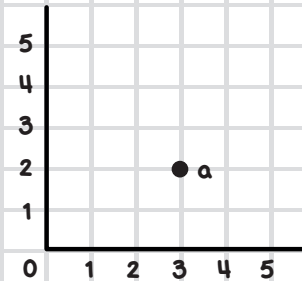
4 °C



Temperature

°C

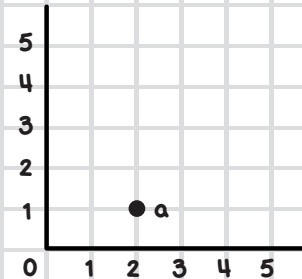
2



Write down the co-ordinates for point a

A = (,)

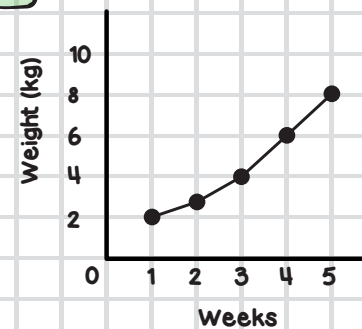
3



What is the x co-ordinate of point a?

x =

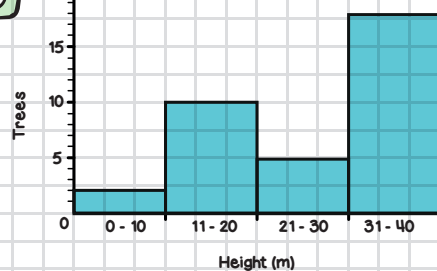
10



A vet recorded the weight of a puppy over 5 weeks.

How much did the puppy weigh in week 3?

9 Height of Trees in the Park



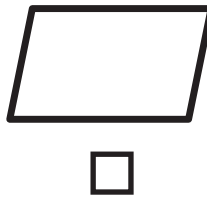
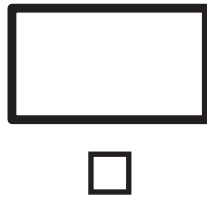
How many trees were 21 - 30m tall?

MY LAST SCORE?!

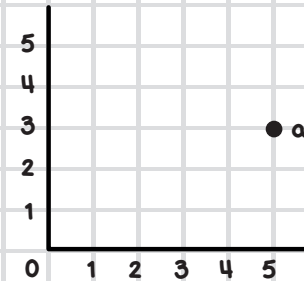
HAVE I BEAT THAT?!



1 Tick the quadrilateral that is a kite



2



Write down the co-ordinates for point a

A = (,)

5 Round to the nearest whole number:

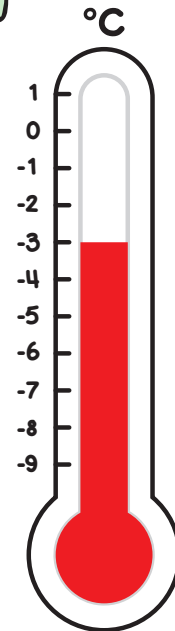
1.5 →

6 $\frac{1}{6}$ of 36 =

$\frac{1}{9}$ of 54 =

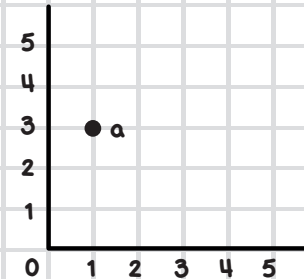
$\frac{1}{9}$ of 81 =

4



Temperature °C

3



What is the x co-ordinate of point a?

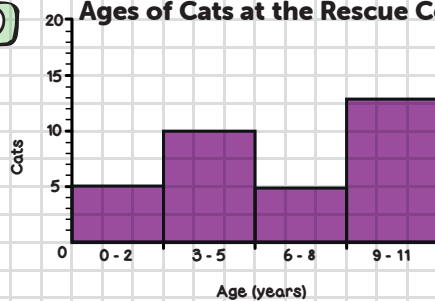
x =

7 $7 \times \frac{1}{9} =$

8 Simplify:

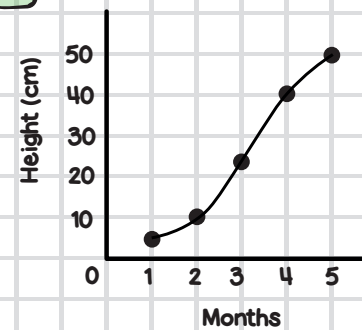
$\frac{2}{10} =$

9 Ages of Cats at the Rescue Centre



How many cats were 3 - 5 years old?

10



A gardener recorded the height of a plant over 5 months.

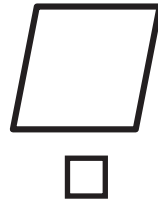
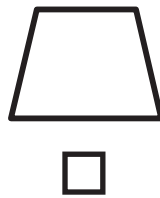
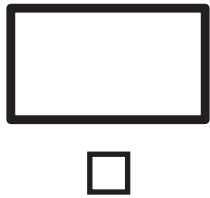
How tall was the plant at 4 months?

MY LAST SCORE?!

HAVE I BEAT THAT?!



1 Tick the quadrilateral that is a rhombus



5 Round to the nearest whole number:

8.1 →

6 $\frac{1}{6}$ of 36 =

$\frac{1}{9}$ of 54 =

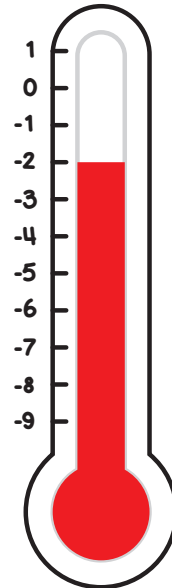
$\frac{1}{9}$ of 81 =

7 $4 \times \frac{1}{8} =$

8 Simplify:

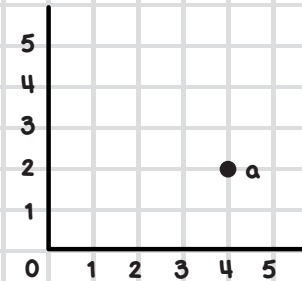
$\frac{10}{50} =$

4 $^{\circ}\text{C}$



Temperature $^{\circ}\text{C}$

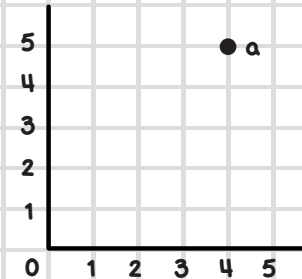
2



Write down the co-ordinates for point a

A = (,)

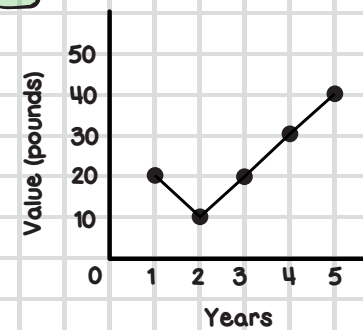
3



What is the y co-ordinate of point a?

y =

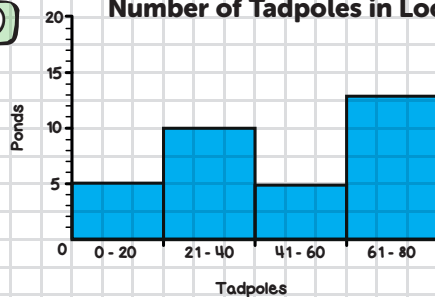
10



A pupil recorded the value of their card collection over 5 years.

What was the value at 3 years?

9 Number of Tadpoles in Local Ponds



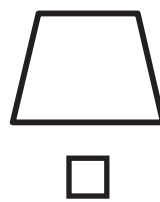
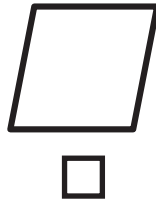
How many ponds had 41 - 60 tadpoles?

MY LAST SCORE?!

HAVE I BEAT THAT?!



1 Tick the quadrilateral that is a trapezium



5 Round to the nearest whole number:

3.9 →

6 $\frac{1}{7}$ of 42 =

$\frac{1}{6}$ of 42 =

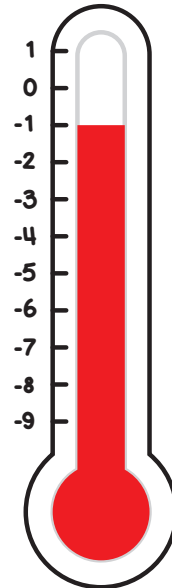
$\frac{1}{7}$ of 49 =

7 $3 \times \frac{1}{7} =$

8 Simplify:

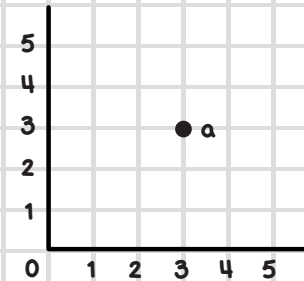
$\frac{2}{10} =$

4 $^{\circ}\text{C}$



Temperature $^{\circ}\text{C}$

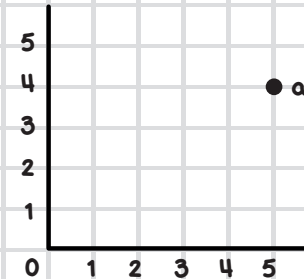
2



Write down the co-ordinates for point a

A = (,)

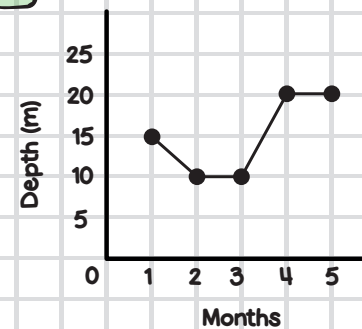
3



What is the y co-ordinate of point a?

y =

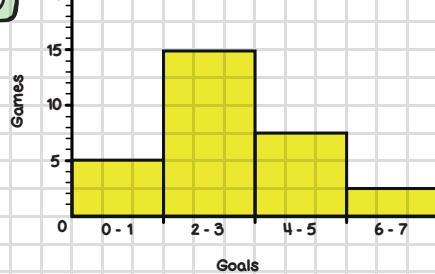
10



Pupils recorded the depth of a river over 5 months.

What was the depth at 4 months?

9 Number of Goals in Football Games



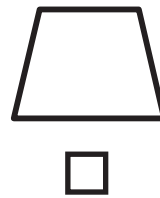
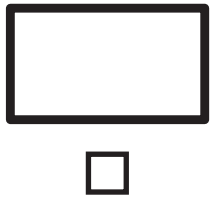
How many games had 2 - 3 goals?

MY LAST SCORE?!

HAVE I BEAT THAT?!



1 Tick the quadrilateral that is a kite



5 Round to the nearest whole number:

7.3 →

6 $\frac{1}{5}$ of 35 =

$\frac{1}{4}$ of 36 =

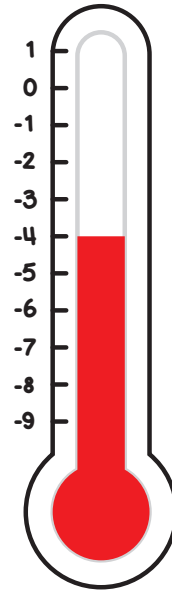
$\frac{1}{7}$ of 63 =

7 $2 \times \frac{1}{9} =$

8 Simplify:

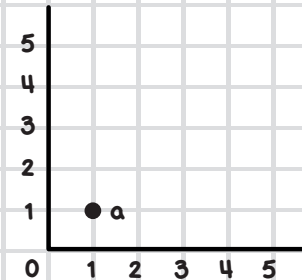
$\frac{5}{15} =$

4 °C



Temperature °C

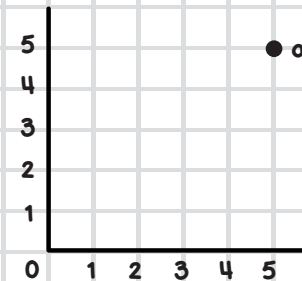
2



Write down the co-ordinates for point a

A = (,)

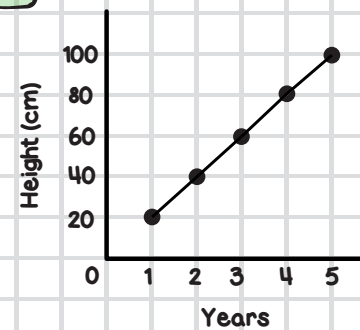
3



What is the x co-ordinate of point a?

x =

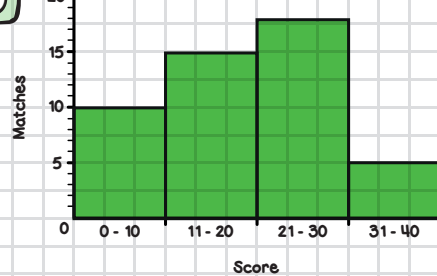
10



A pupil recorded the height of a plant over 5 years.

What was the height at 3 years?

9 A Team's Netball Scores for a Season



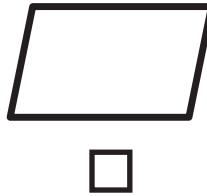
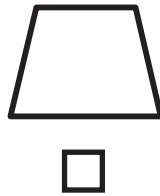
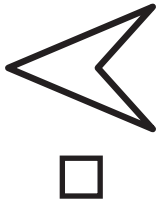
How many matches did they score 21 - 30 points?

MY LAST SCORE?!

HAVE I BEAT THAT?!



1 Tick the quadrilateral that is a parallelogram



5 Round to the nearest whole number:

5.5 →

6 $\frac{1}{6}$ of 54 =

$\frac{1}{9}$ of 63 =

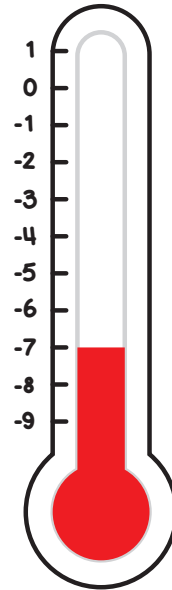
$\frac{1}{7}$ of 49 =

7 $8 \times \frac{1}{9} =$

8 Simplify:

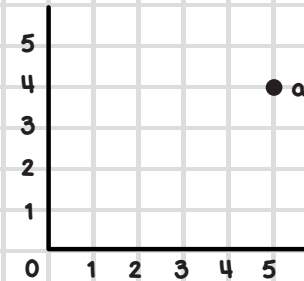
$\frac{10}{30} =$

4 °C



Temperature °C

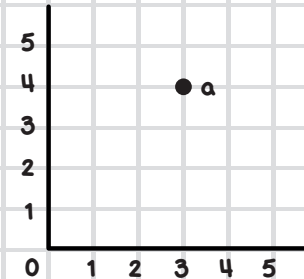
2



Write down the co-ordinates for point a

A = (,)

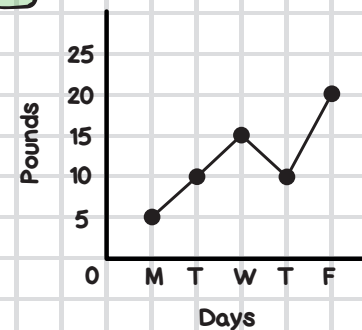
3



What is the x co-ordinate of point a?

x =

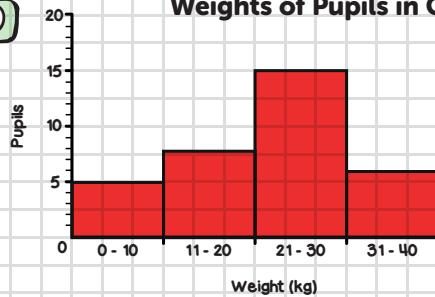
10



A Sweet Shop owner recorded their sales over 5 days.

What was the value of sweets sold on Thursday?

9 Weights of Pupils in Class 3B



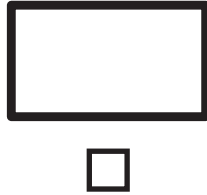
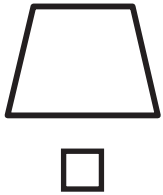
How many pupils weighed 21 - 30 kilograms?

MY LAST SCORE?!

HAVE I BEAT THAT?!



1 Tick the quadrilateral that is a trapezium



5 Round to the nearest whole number:

8.8 →

6 $\frac{1}{9}$ of 81 =

$\frac{1}{7}$ of 49 =

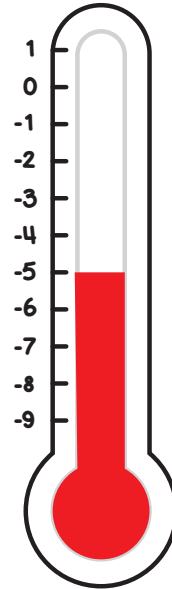
$\frac{1}{6}$ of 36 =

7 $6 \times \frac{1}{7} =$

8 Simplify:

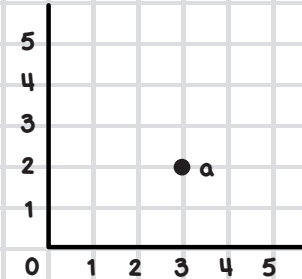
$\frac{2}{6} =$

4 °C



Temperature °C

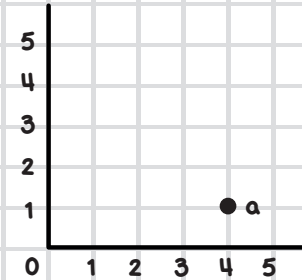
2



Write down the co-ordinates for point a

A = (,)

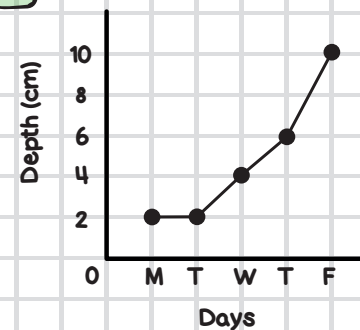
3



What is the y co-ordinate of point a?

y =

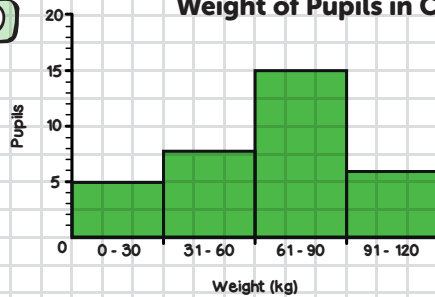
10



Pupils recorded the depth of snow over 5 days.

What was the depth of the snow on Friday?

9 Weight of Pupils in Class 3B



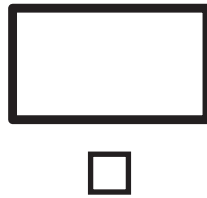
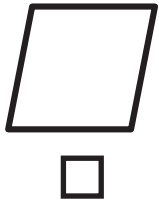
How many pupils weighed 0 - 30 kilograms?

MY LAST SCORE?!

HAVE I BEAT THAT?!



1 Tick the quadrilateral that is a rhombus



5 Round to the nearest whole number:

6.2 →

6 $\frac{1}{9}$ of 81 =

$\frac{1}{7}$ of 49 =

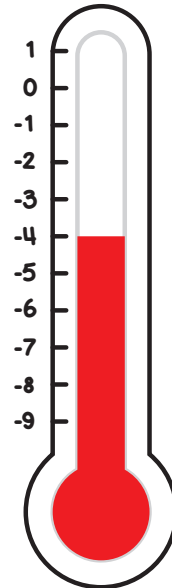
$\frac{1}{6}$ of 36 =

7 $4 \times \frac{1}{9} =$

8 Simplify:

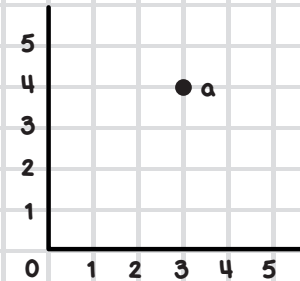
$\frac{10}{20} =$

4 $^{\circ}\text{C}$



Temperature $^{\circ}\text{C}$

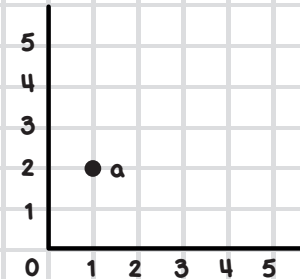
2



Write down the co-ordinates for point a

A = (,)

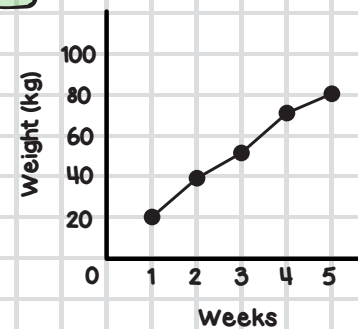
3



What is the x co-ordinate of point a?

x =

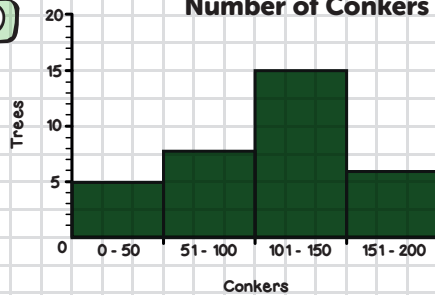
10



A vet recorded the weight of a new born horse over 5 weeks.

What was the weight of the horse at week 2?

9 Number of Conkers Found



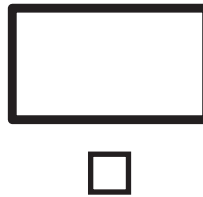
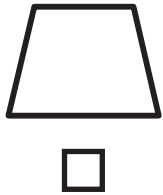
How many trees had 51 - 100 conkers?

MY LAST SCORE?!

HAVE I BEAT THAT?!



1 Tick the quadrilateral that is a trapezium



5 Round to the nearest whole number:

4.7 →

6 $\frac{1}{9}$ of 81 =

$\frac{1}{7}$ of 49 =

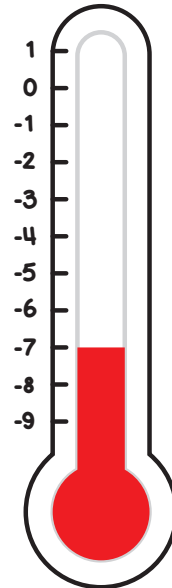
$\frac{1}{6}$ of 36 =

7 $4 \times \frac{1}{5} =$

8 Simplify:

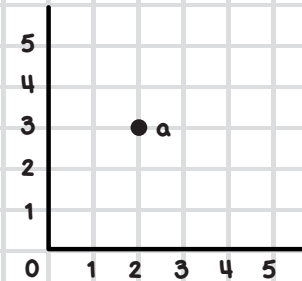
$\frac{5}{10} =$

4 $^{\circ}\text{C}$



Temperature $^{\circ}\text{C}$

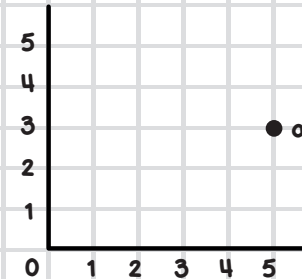
2



Write down the co-ordinates for point a

A = (,)

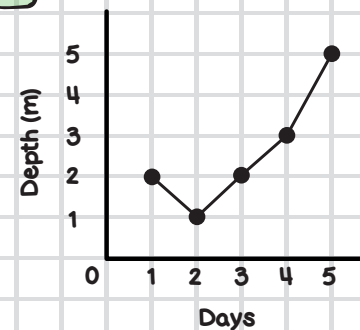
3



What is the y co-ordinate of point a?

y =

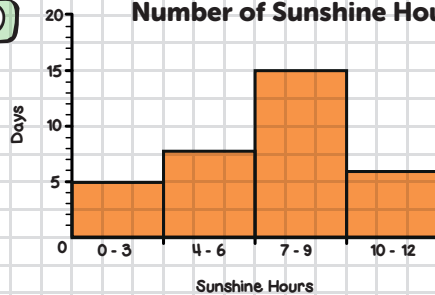
10



Pupils recorded the depth of their pond over 5 days.

What was the depth of the pond on day 4?

9 Number of Sunshine Hours per day



How many days had 0 - 3 sunshine hours?

MY LAST SCORE?!

HAVE I BEAT THAT?!



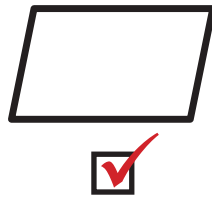
ANSWERS

SAFE 14

SET: 1

/10

1 Tick the quadrilateral that is a parallelogram



5 Round to the nearest whole number:

$$3.4 \rightarrow 3$$

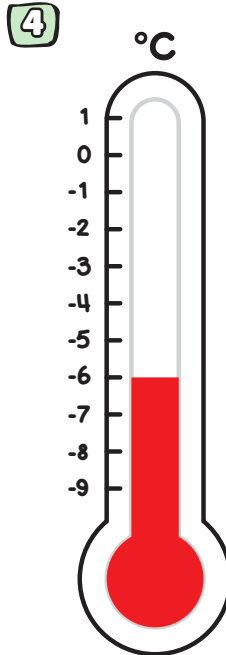
6 $\frac{1}{7}$ of 56 = 8

$\frac{1}{4}$ of 32 = 8

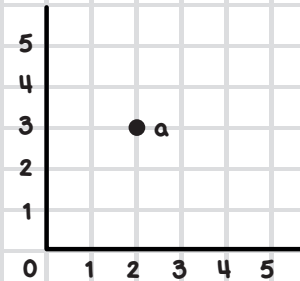
$\frac{1}{6}$ of 48 = 8

7 $8 \times \frac{1}{9} =$
 $\frac{8}{9}$

8 Simplify:
 $\frac{10}{40} = \frac{1}{4}$



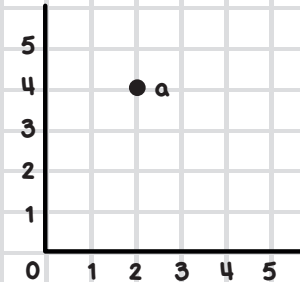
2



Write down the co-ordinates for point a

A = (**2** , **3**)

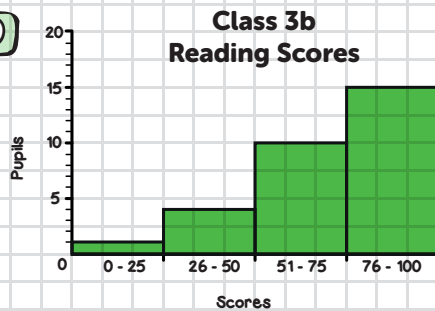
3



What is the y co-ordinate of point a?

y = **4**

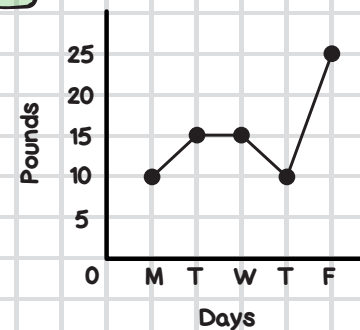
9



How many pupils scored more than 75 marks?

15

10



A school tuck shop recorded its sales over one week.

How much money did the sales produce on Wednesday?

£15



MY LAST SCORE?!

HAVE I BEAT THAT?!



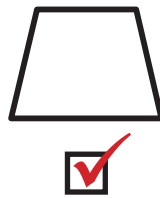
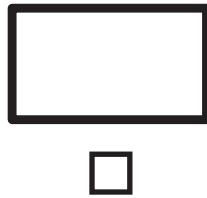
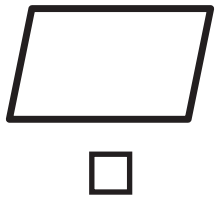
ANSWERS

SAFE 14

SET: 2

/10

1 Tick the quadrilateral that is a trapezium



5 Round to the nearest whole number:

$$6.2 \rightarrow 6$$

6 $\frac{1}{7}$ of 56 = 8

$\frac{1}{4}$ of 32 = 8

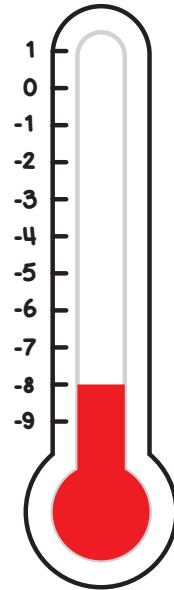
$\frac{1}{6}$ of 48 = 8

7 $4 \times \frac{1}{6} =$
 $\frac{4}{6}$

8 Simplify:

$$\frac{5}{20} = \frac{1}{4}$$

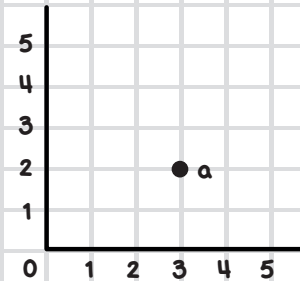
4 $^{\circ}\text{C}$



Temperature

-8 $^{\circ}\text{C}$

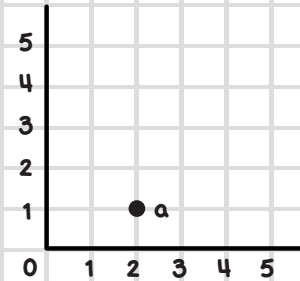
2



Write down the co-ordinates for point a

$A = (3, 2)$

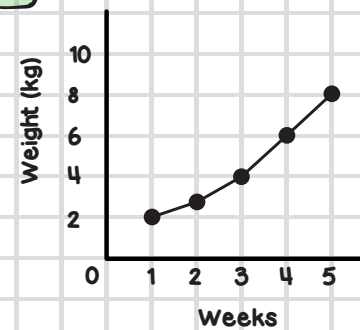
3



What is the x co-ordinate of point a?

$x = 2$

10

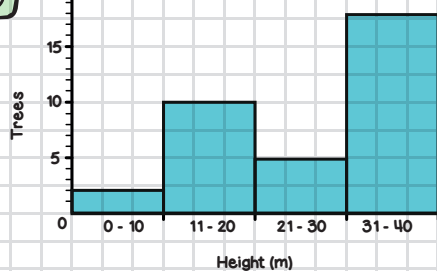


A vet recorded the weight of a puppy over 5 weeks.

How much did the puppy weigh in week 3?

4kg

9 Height of Trees in the Park



How many trees were 21 - 30m tall?

5

MY LAST SCORE?!

HAVE I BEAT THAT?!



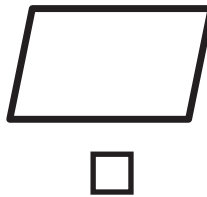
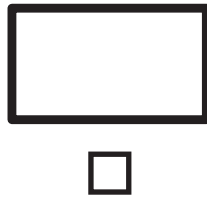
ANSWERS

SAFE 14

SET: 3

/10

1 Tick the quadrilateral that is a kite



5 Round to the nearest whole number:

$$1.5 \rightarrow 2$$

6 $\frac{1}{6}$ of 36 = 6

$\frac{1}{9}$ of 54 = 6

$\frac{1}{9}$ of 81 = 9

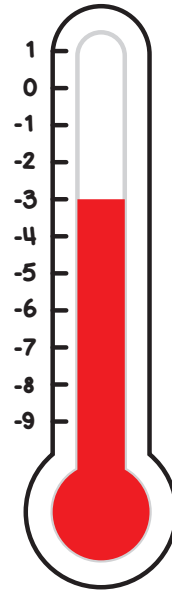
7 $7 \times \frac{1}{9} =$

$$\frac{7}{9}$$

8 Simplify:

$$\frac{2}{10} = \frac{1}{5}$$

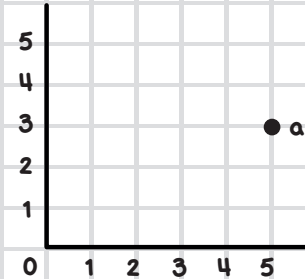
4 $^{\circ}\text{C}$



Temperature

-3 $^{\circ}\text{C}$

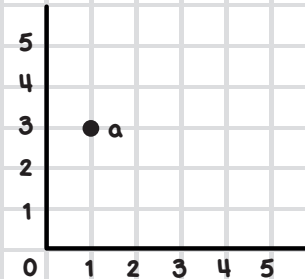
2



Write down the co-ordinates for point a

$$A = (5 , 3)$$

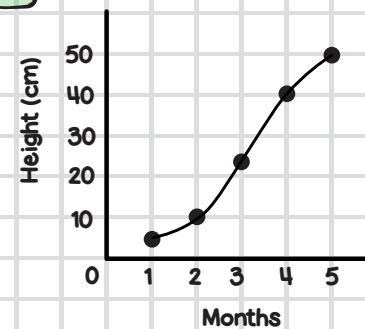
3



What is the x co-ordinate of point a?

$$x = 1$$

10

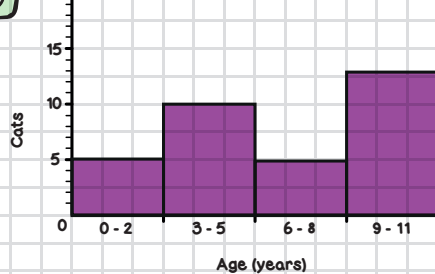


A gardener recorded the height of a plant over 5 months.

How tall was the plant at 4 months?

40cm

9 Ages of Cats at the Rescue Centre



How many cats were 3 - 5 years old?

10

MY LAST SCORE?!

HAVE I BEAT THAT?!



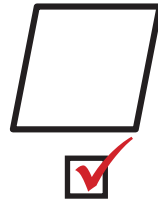
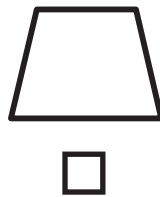
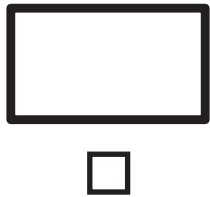
ANSWERS

SAFE 14

SET: 4

/10

1 Tick the quadrilateral that is a rhombus



5 Round to the nearest whole number:

$$8.1 \rightarrow 8$$

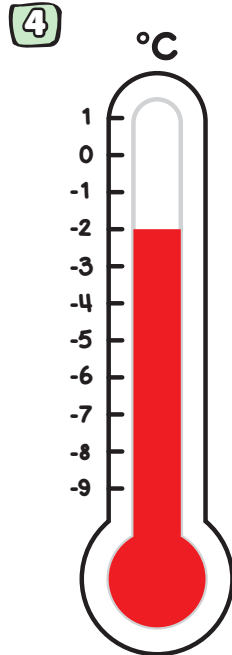
6 $\frac{1}{6}$ of 36 = 6

$\frac{1}{9}$ of 54 = 6

$\frac{1}{9}$ of 81 = 9

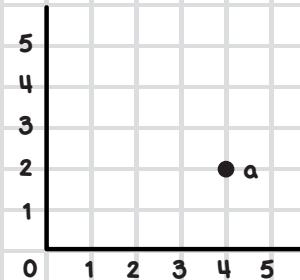
7 $4 \times \frac{1}{8} =$
 $\frac{4}{8}$

8 Simplify:
 $\frac{10}{50} = \frac{1}{5}$



Temperature
-2 °C

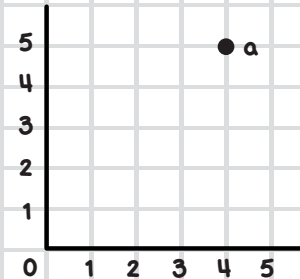
2



Write down the co-ordinates for point a

A = (**4** , **2**)

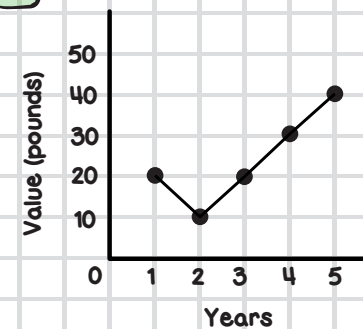
3



What is the y co-ordinate of point a?

y = **5**

10

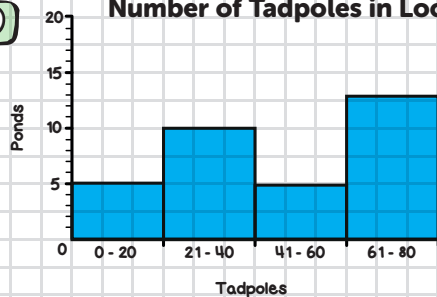


A pupil recorded the value of their card collection over 5 years.

What was the value at 3 years?

£20

9 Number of Tadpoles in Local Ponds



How many ponds had 41 - 60 tadpoles?

5

MY LAST SCORE?!

HAVE I BEAT THAT?!



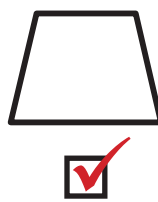
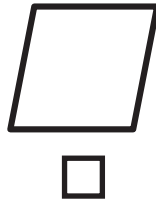
ANSWERS

SAFE 14

SET: 5

/10

1 Tick the quadrilateral that is a trapezium



5 Round to the nearest whole number:

$$3.9 \rightarrow 4$$

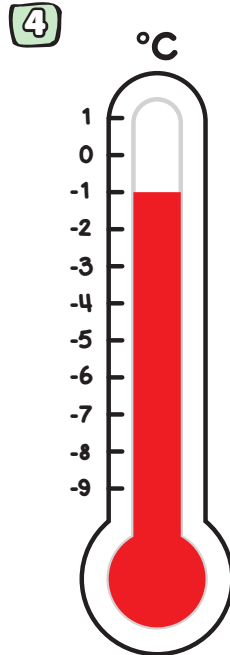
6 $\frac{1}{7}$ of 42 = 6

$\frac{1}{6}$ of 42 = 7

$\frac{1}{7}$ of 49 = 7

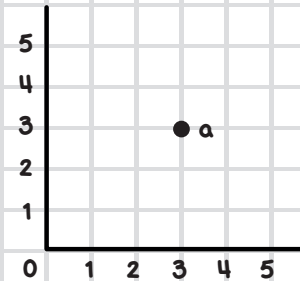
7 $3 \times \frac{1}{7} =$
 $\frac{3}{7}$

8 Simplify:
 $\frac{2}{10} = \frac{1}{5}$



Temperature
-1 °C

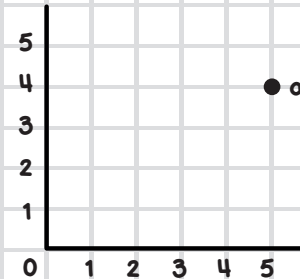
2



Write down the co-ordinates for point a

A = (**3** , **3**)

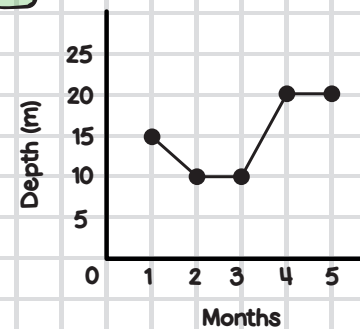
3



What is the y co-ordinate of point a?

y = **4**

10



Pupils recorded the depth of a river over 5 months.

What was the depth at 4 months?

20m

9 Number of Goals in Football Games



How many games had 2 - 3 goals?

15

MY LAST SCORE?!

HAVE I BEAT THAT?!



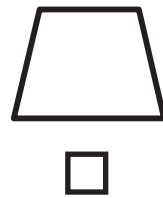
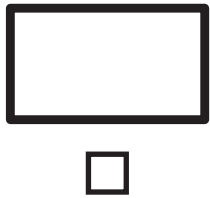
ANSWERS

SAFE 14

SET: 6

/10

1 Tick the quadrilateral that is a kite



5 Round to the nearest whole number:

$$7.3 \rightarrow 7$$

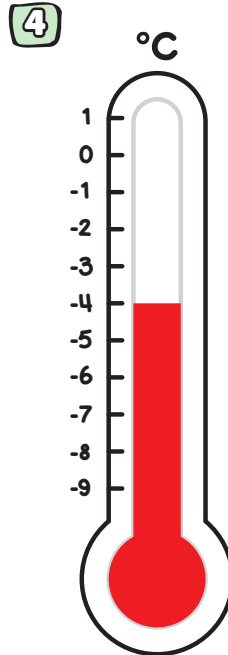
6 $\frac{1}{5}$ of 35 = 7

$\frac{1}{4}$ of 36 = 9

$\frac{1}{7}$ of 63 = 9

7 $2 \times \frac{1}{9} =$
 $\frac{2}{9}$

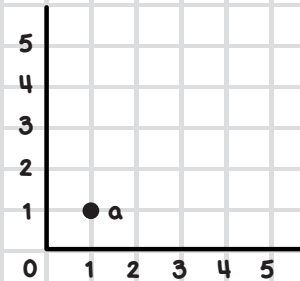
8 Simplify:
 $\frac{5}{15} = \frac{1}{3}$



Temperature

-4 °C

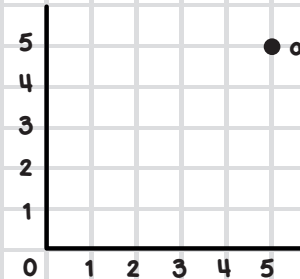
2



Write down the co-ordinates for point a

A = (**1** , **1**)

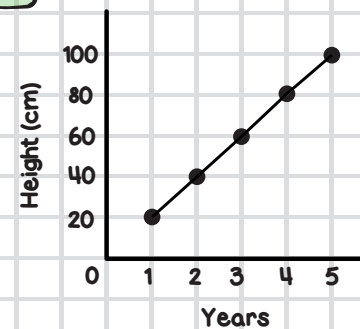
3



What is the x co-ordinate of point a?

x = **5**

10

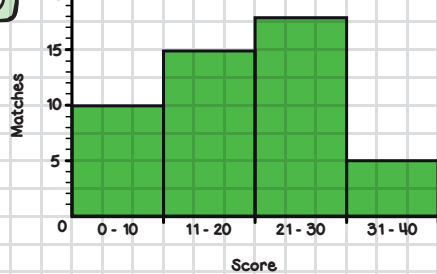


A pupil recorded the height of a plant over 5 years.

What was the height at 3 years?

60cm

9 A Team's Netball Scores for a Season



How many matches did they score 21 - 30 points?

18

MY LAST SCORE?!

HAVE I BEAT THAT?!



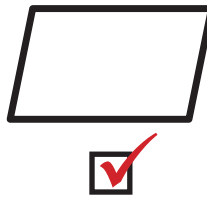
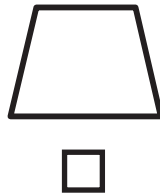
ANSWERS

SAFE 14

SET: 7

/10

1 Tick the quadrilateral that is a parallelogram



5 Round to the nearest whole number:

$$5.5 \rightarrow 6$$

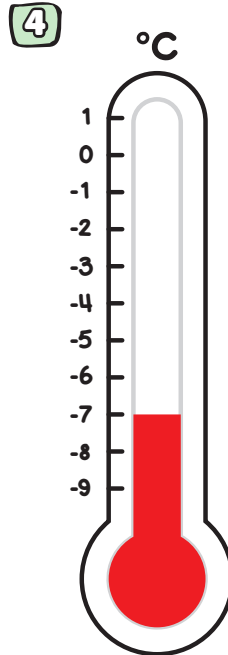
6 $\frac{1}{6}$ of 54 = 9

$\frac{1}{9}$ of 63 = 7

$\frac{1}{7}$ of 49 = 7

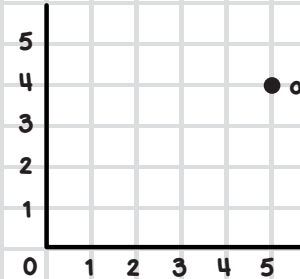
7 $8 \times \frac{1}{9} =$
 $\frac{8}{9}$

8 Simplify:
 $\frac{10}{30} = \frac{1}{3}$



Temperature
-7 °C

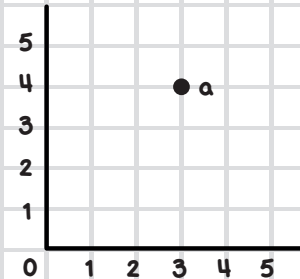
2



Write down the co-ordinates for point a

A = (**5** , **4**)

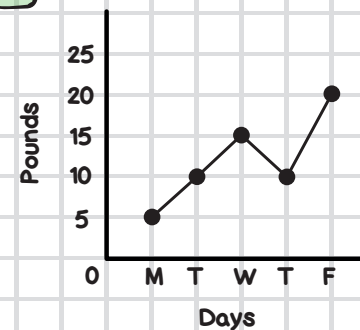
3



What is the x co-ordinate of point a?

x = **3**

10

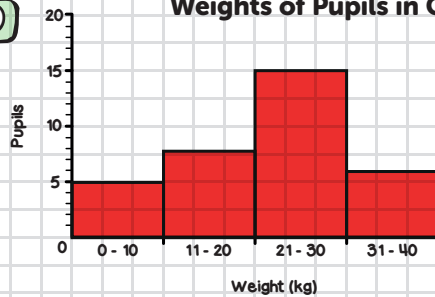


A Sweet Shop owner recorded their sales over 5 days.

What was the value of sweets sold on Thursday?

£10

9 Weights of Pupils in Class 3B



How many pupils weighed 21 - 30 kilograms?

15

MY LAST SCORE?!

HAVE I BEAT THAT?!



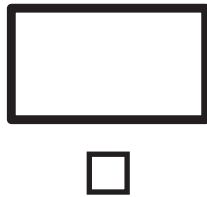
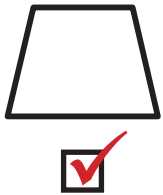
ANSWERS

SAFE 14

SET: 8

/10

1 Tick the quadrilateral that is a trapezium



5 Round to the nearest whole number:

$$8.8 \rightarrow 9$$

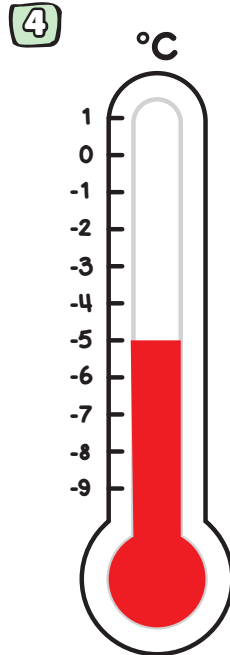
6 $\frac{1}{9}$ of 81 = 9

$\frac{1}{7}$ of 49 = 7

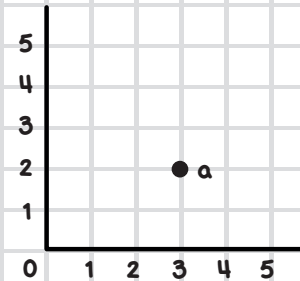
$\frac{1}{6}$ of 36 = 6

7 $6 \times \frac{1}{7} =$
 $\frac{6}{7}$

8 Simplify:
 $\frac{2}{6} = \frac{1}{3}$



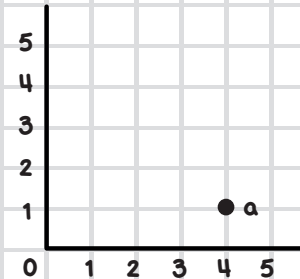
2



Write down the co-ordinates for point a

A = (**3** , **2**)

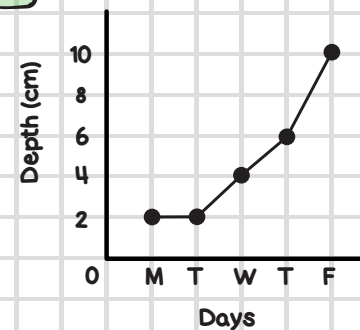
3



What is the y co-ordinate of point a?

y = **1**

10

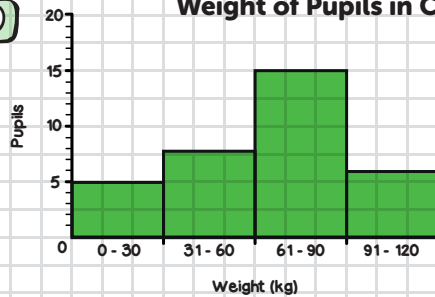


Pupils recorded the depth of snow over 5 days.

What was the depth of the snow on Friday?

10cm

9 Weight of Pupils in Class 3B



How many pupils weighed 0 - 30 kilograms?

5

MY LAST SCORE?!

HAVE I BEAT THAT?!



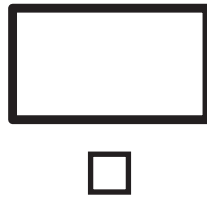
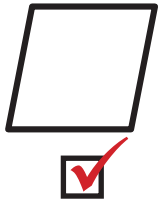
ANSWERS

SAFE 14

SET: 9

/10

1 Tick the quadrilateral that is a rhombus



5 Round to the nearest whole number:

$$6.2 \rightarrow 6$$

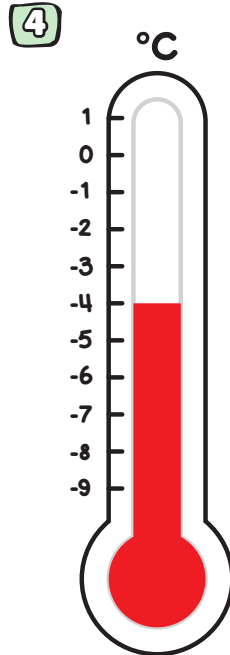
6 $\frac{1}{9}$ of 81 = 9

$\frac{1}{7}$ of 49 = 7

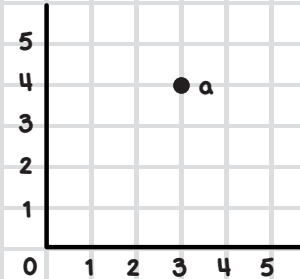
$\frac{1}{6}$ of 36 = 6

7 $4 \times \frac{1}{9} =$
 $\frac{4}{9}$

8 Simplify:
 $\frac{10}{20} = \frac{1}{2}$



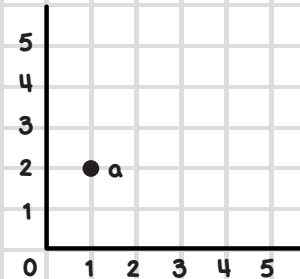
2



Write down the co-ordinates for point a

$A = (3 , 4)$

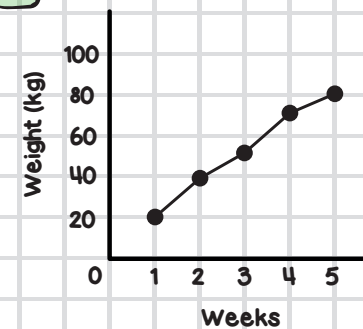
3



What is the x co-ordinate of point a?

$x = 1$

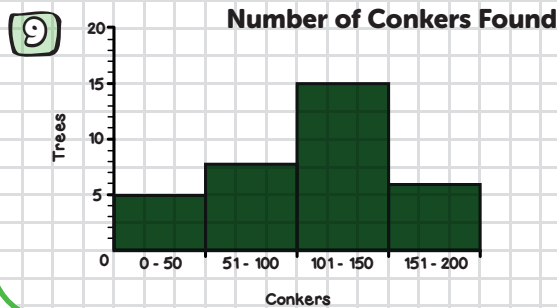
10



A vet recorded the weight of a new born horse over 5 weeks.

What was the weight of the horse at week 2?

40kg



How many trees had 51 - 100 conkers?

8

MY LAST SCORE?!

HAVE I BEAT THAT?!



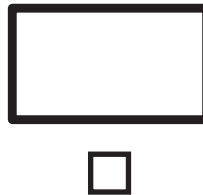
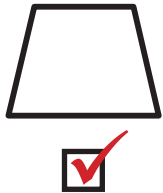
ANSWERS

SAFE 14

SET: 10

/10

1 Tick the quadrilateral that is a trapezium



5 Round to the nearest whole number:

$$4.7 \rightarrow 5$$

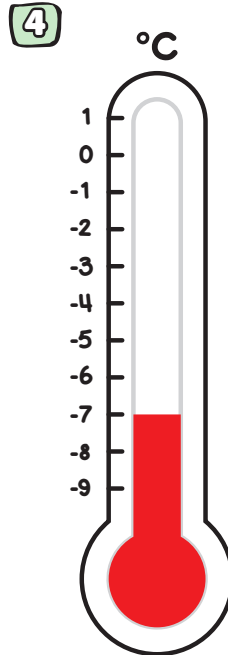
6 $\frac{1}{9}$ of 81 = 9

$\frac{1}{7}$ of 49 = 7

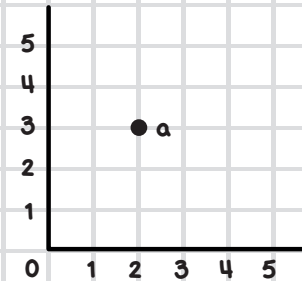
$\frac{1}{6}$ of 36 = 6

7 $4 \times \frac{1}{5} =$
 $\frac{4}{5}$

8 Simplify:
 $\frac{5}{10} = \frac{1}{2}$



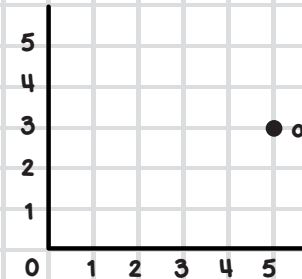
2



Write down the co-ordinates for point a

A = (**2** , **3**)

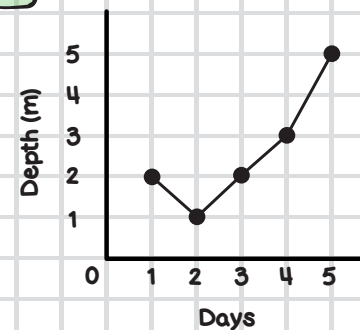
3



What is the y co-ordinate of point a?

y = **3**

10

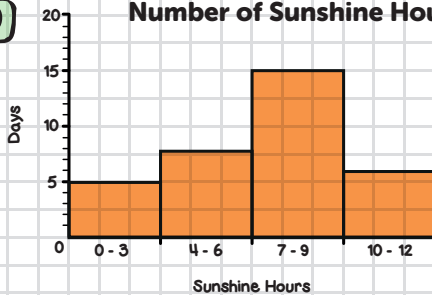


Pupils recorded the depth of their pond over 5 days.

What was the depth of the pond on day 4?

3m

9 Number of Sunshine Hours per day



How many days had 0 - 3 sunshine hours?

5

MY LAST SCORE?!

HAVE I BEAT THAT?!

