2026 national curriculum tests

Key stage 2

Mathematics

Paper 2: reasoning

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
School name						
DfE number						

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B 0 0 0 7 0 A 0 1 2 4

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Instructions

You **must not** use a calculator to answer any questions in this test.

Questions and answers

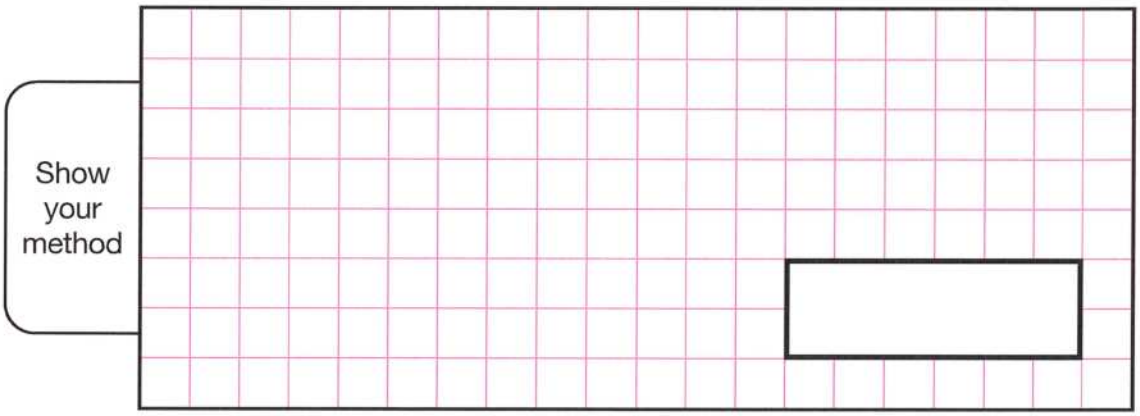
You have **40 minutes** to complete this test.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

If you need to do working out, you can use the space around the question.
Do not write over any barcodes.

Some questions have a method box like this:



For these questions, you may get a mark for showing your method.

If you cannot do a question, **go on to the next one**.
You can come back to it later, if you have time.

If you finish before the end, **go back and check your work**.

Marks

The number under each line at the side of the page tells you the number of marks available for each question.

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1 Write these numbers in order.

Start with the least.

1,505 1,050 1,005 1,500

1005	1050	1500	1505

least

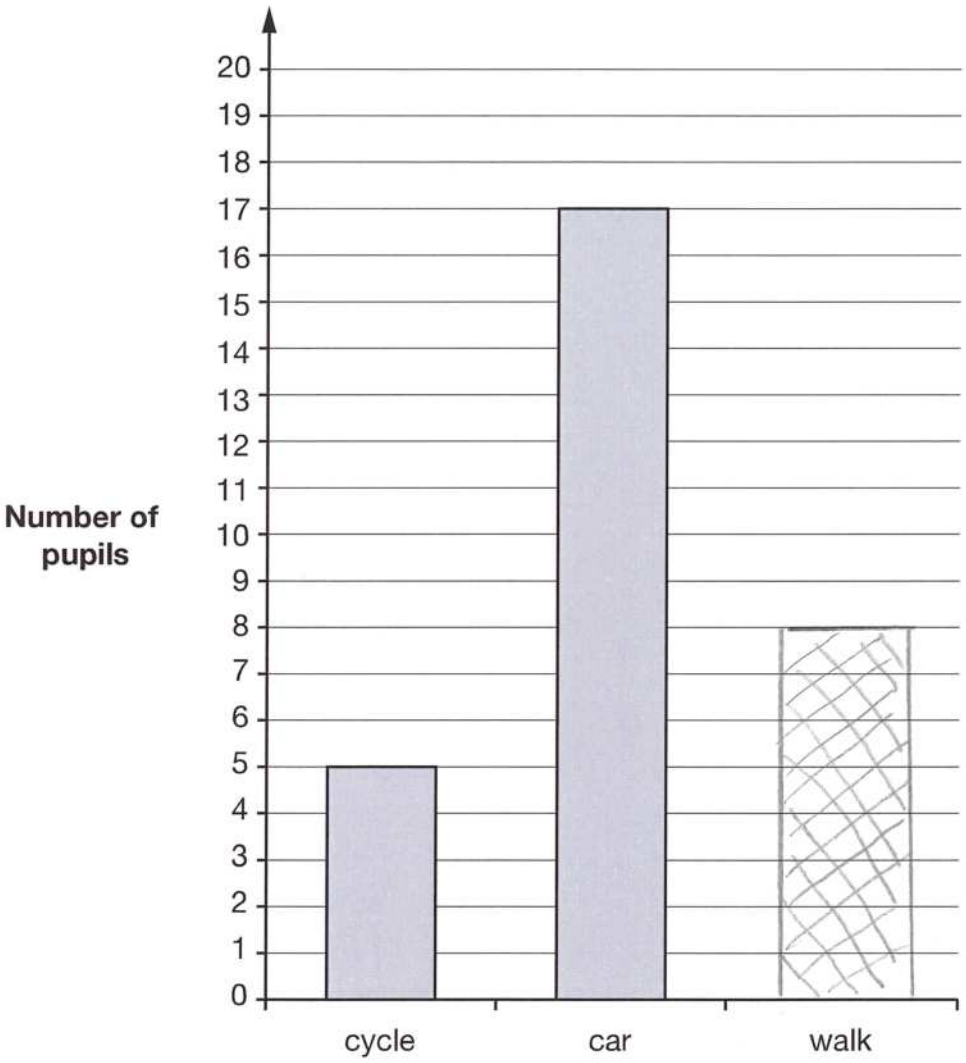
1 mark

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2 30 pupils were asked how they travelled to school.

Complete the graph to show how many children walk to school.

Use a ruler.



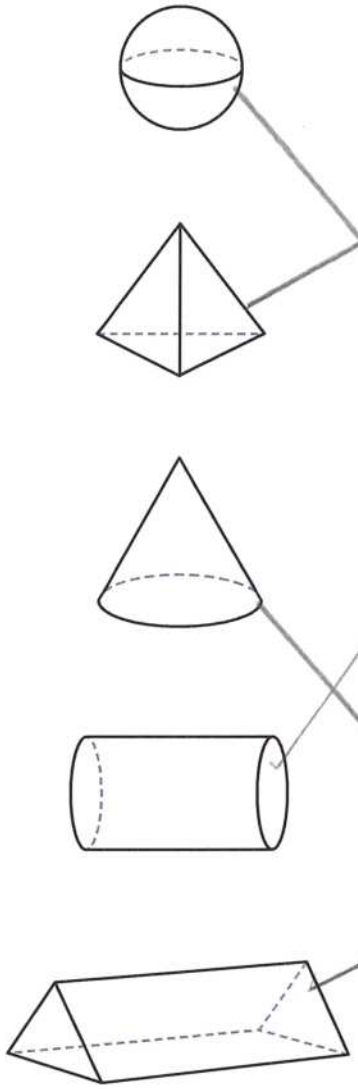
1 mark

17 + 5 = 22

30 - 22 = 8

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3 Match each shape to its name.



triangle-based pyramid

cylinder

sphere

triangular prism

cone

1 mark

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4 This table shows the numbers of children in each year in a school.

One number is missing.

	Year 3	Year 4	Year 5	Year 6
Children	119	114	118	117

There are **468** children in the school altogether.

How many children are in Year 4?

$$\begin{array}{r} 119 \\ +\ 118 \\ \hline 117 \\ \hline 354 \\ \hline 2 \end{array} \qquad \begin{array}{r} 468 \\ -\ 354 \\ \hline 114 \end{array}$$

114

1 mark

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5



Jack buys a book for £11.79

He pays for the book with a £10 note and a £5 note.

How much **change** does he get?

$$\begin{array}{r} {}^{4}1\,5\,.\,{}^{9}\cancel{0}\,{}^{1}0 \\ -\;1\,1\,.\,7\,9 \\ \hline 3\,.\,2\,1 \end{array}$$

£ 3.21

1 mark

6

Ken has 14 comics.

Maria has one more comic than Ken.

Stefan has 3 times as many comics as Maria.



How many comics do Ken, Maria and Stefan have **altogether**?

Show your method

Ken = 14
Maria = 15
Stefan = 15 x 3 = 45

$$\begin{array}{r} 4\,5 \\ +\;1\,5 \\ 1\,4 \\ \hline 7\,4 \\ {\scriptstyle 1\;1} \end{array}$$

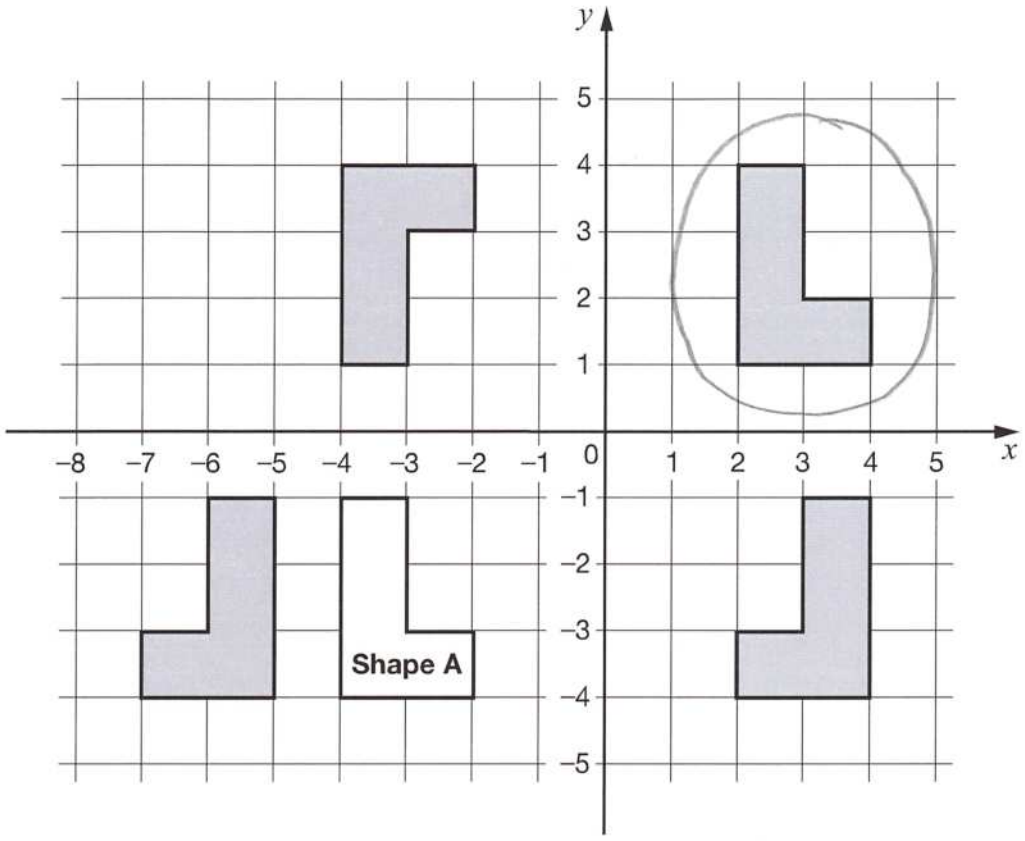
74 comics

2 marks

B 0 0 0 7 0 A 0 8 2 4

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7 This grid shows Shape A and four transformations of the shape.



Circle the transformation that is **not** a **reflection** of Shape A.

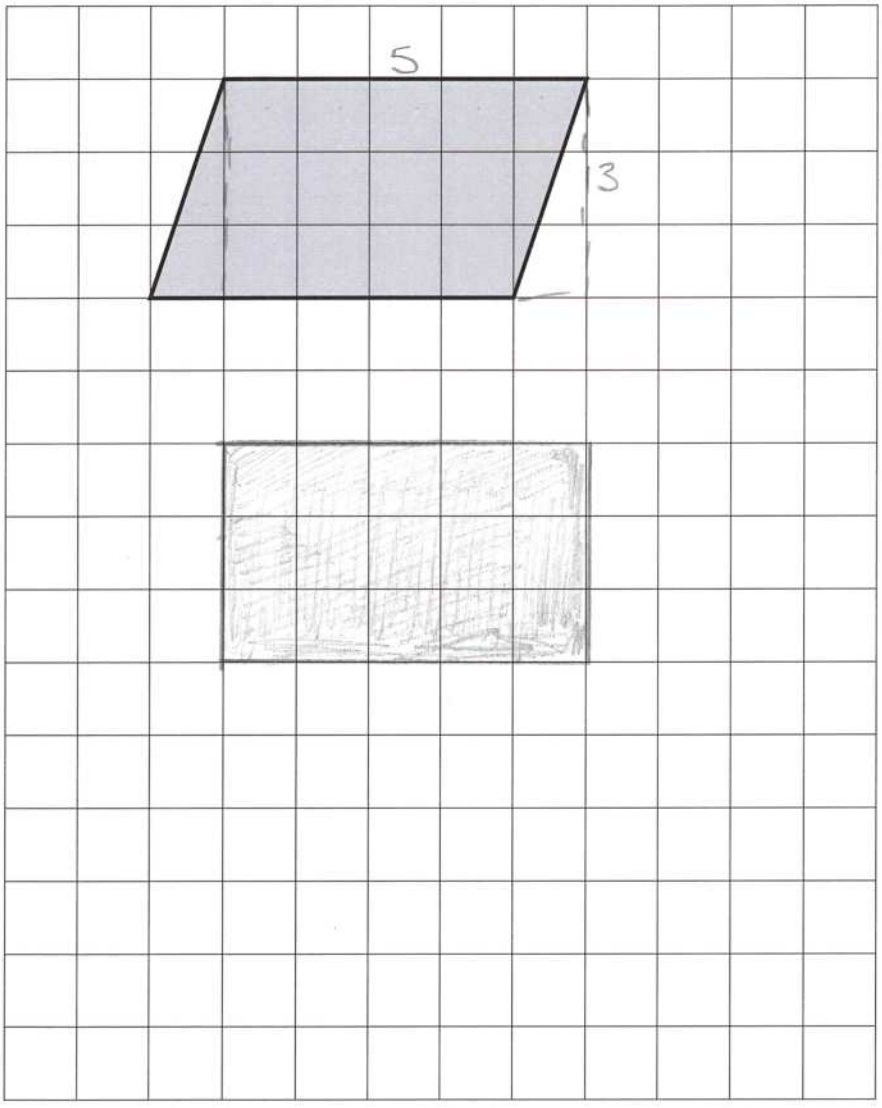
1 mark

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8 Here is a shaded parallelogram on a square grid.

Draw a **rectangle** on the grid that has the **same area** as the parallelogram.

Use a ruler.



5 x 3 = 15

1 mark

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9 Here are some statements about multiples.

Tick the statements that are **true**.

All multiples of 9 are multiples of 6	☐
All multiples of 20 are multiples of 10	☑
All multiples of 5 are multiples of 10	☐
All multiples of 10 are multiples of 5	☑

9 18 27
6 12 18 24 30

5 10 15 20
10 20

1 mark

10 Amir makes a necklace with blue and red beads.

For every 5 blue beads there are 3 red beads.

There are 30 **blue** beads in the necklace.

What is the **total** number of beads in the necklace?

Show your method

blue red
x6 (5 : 3) x6
30 : 18
30 + 18 = 48

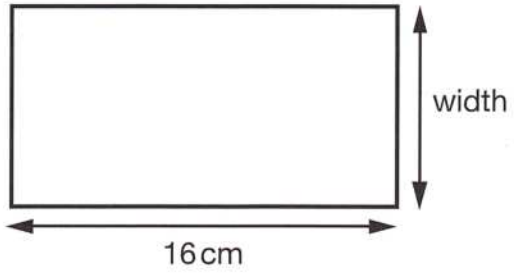
48

2 marks

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11 This rectangle has a length of 16 centimetres.

The **perimeter** of the rectangle is **50** centimetres.



Not actual size

What is the **width** of the rectangle?

16 x 2 = 32
50 - 32 = 18
18 ÷ 2 = 9

9 **cm**

1 mark

12 Round **349,909**

to the nearest **10** 349 910

349 90 9

to the nearest **100** 349 900

349 9 09

to the nearest **1,000** 350 000

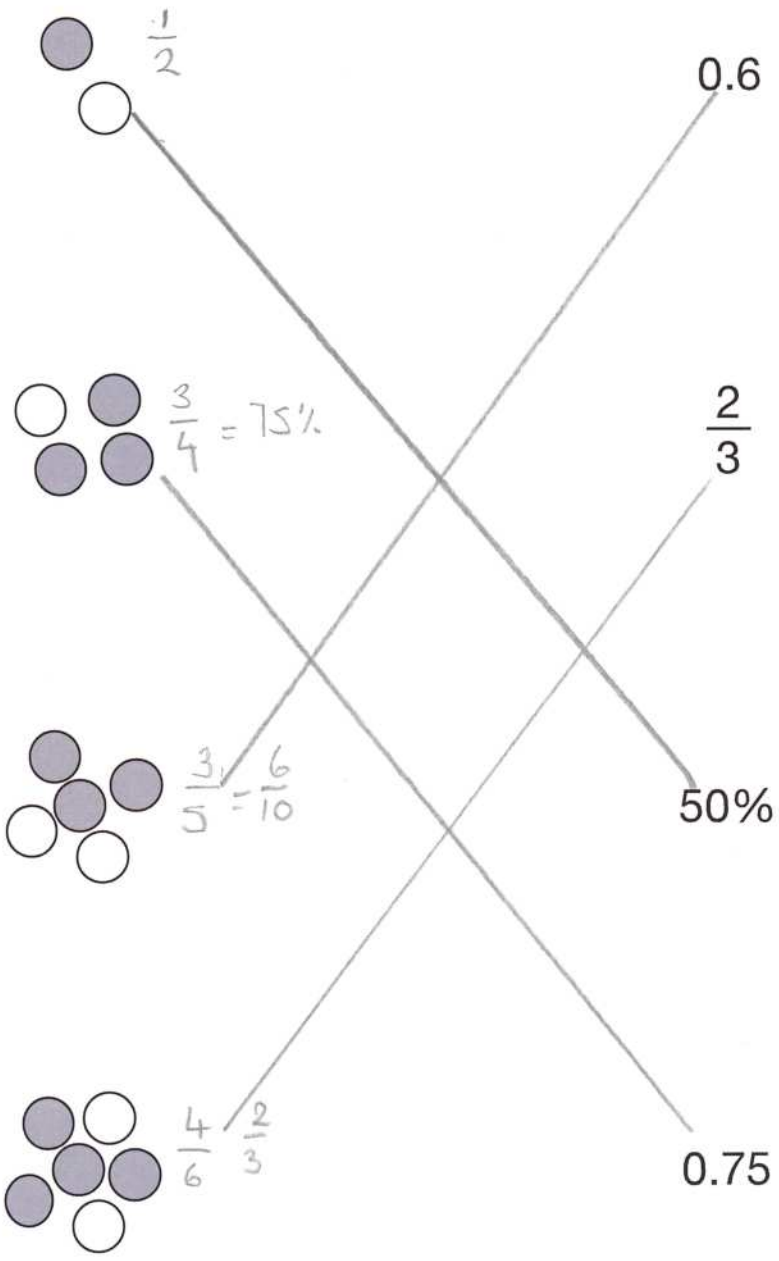
349 909

2 marks

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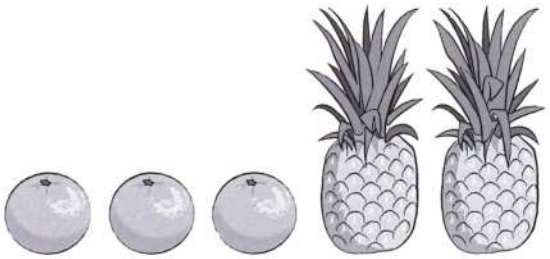
13 Draw lines to match each group to the proportion that is **shaded**.



2 marks

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14 3 oranges and 2 pineapples cost **£4.06** altogether.



Oranges cost **36p** each.

What is the cost of **one** pineapple?

Show your method

0.36 × 3 = 1.08

3 9
4.06 − 1.08 = 2.98

1.49
2|2.9 8

£ 1.49

2 marks

Sourced from SATs-Papers.co.uk • https://www.SATs-Papers.co.uk

B 0 0 0 7 0 A 0 1 4 2 4

15 Write the missing numbers to make these divisions correct.

$24 \div \boxed{10} = 2.4$

$24 \div \boxed{20} = 1.2$

$2.4 \div \boxed{2} = 1.2$

2 marks

Sourced from SATs-Papers.co.uk • https://www.SATs-Papers.co.uk

16 Circle the fractions that are **less than** $\frac{2}{3}$

$\frac{5}{9}$ $\frac{4}{9}$ $\frac{7}{9}$ $\frac{8}{9}$ $\frac{3}{9}$

1 mark

$\frac{2}{3} = \frac{6}{9}$

Circle the fractions that are **greater than** $\frac{2}{5}$ $< \frac{1}{2}$

$\frac{5}{8}$ $\frac{3}{8}$ $\frac{2}{8}$ $\frac{6}{8}$ $\frac{4}{8}$

1 mark

17 Amina is on holiday in France.

She sees this road sign.

PARIS

320 km

How many **miles** does Amina need to travel to get to Paris?

Use the conversion: **5 miles = 8 kilometres**

×4(5 : 8 ×40
200 : 320

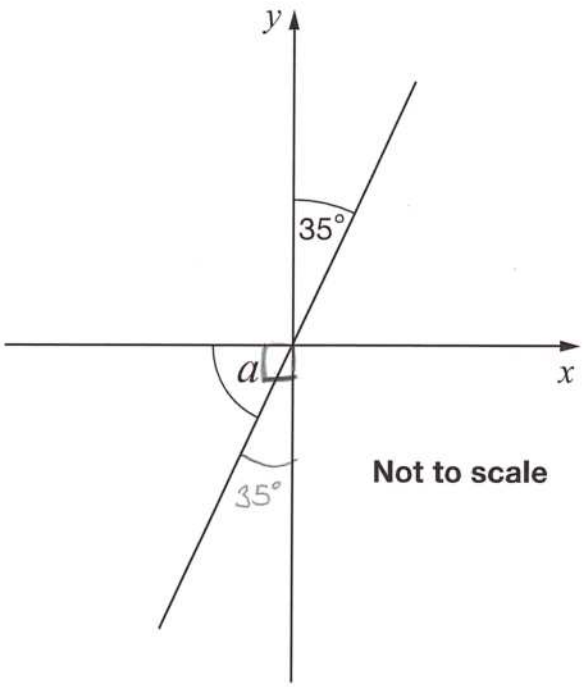
200 **miles**

1 mark

B 0 0 0 7 0 A 0 1 6 2 4

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18 A line makes an angle with the x-axis as shown.



Not to scale

Calculate the size of angle a.

90 - 35 = 55

a is 55 °

1 mark

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19 Megan buys 6 cans of beans.

The total mass of the cans is 2.49 kilograms.

What is the mass of one can, in **grams**?

Show your method

$2.49 \times 1000 = 2490$

$2490 \div 6 = 415$

415 g

2 marks

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20 Mabel has some 5p and 2p coins.

She has a total of 41p.

Complete the table to show how many of each type of coin she could have.

One row has been done for you.

5p	2p
1	18
3	13
5	8
7	3

There must be an odd number of 5ps to create the 1p in 41p.

15 + 26 = 41 26 ÷ 2 = 13

25 + 16 = 41 16 ÷ 2 = 8

35 + 6 = 41 6 ÷ 2 = 3

2 marks

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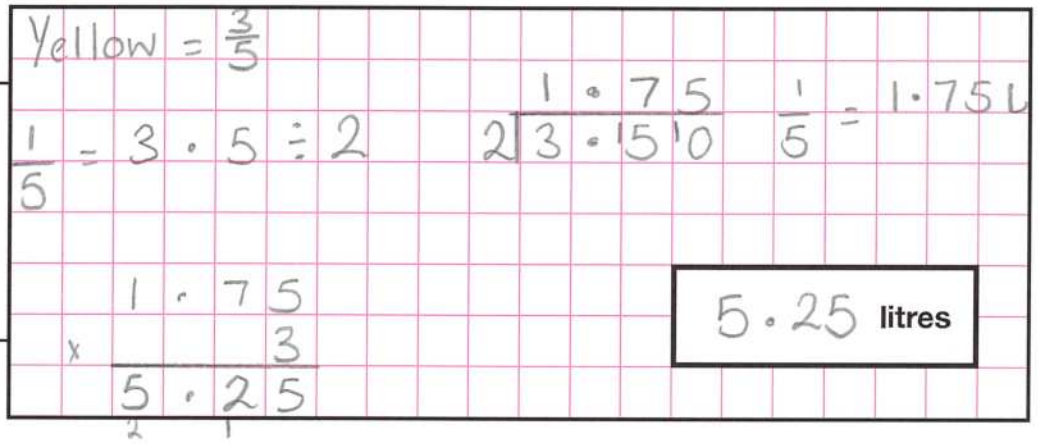
21 Kirsty mixes blue paint and yellow paint.

$\frac{2}{5}$ of her mixture is blue paint.

She uses **3.5** litres of blue paint.

How many litres of **yellow** paint does Kirsty use?

Show your method

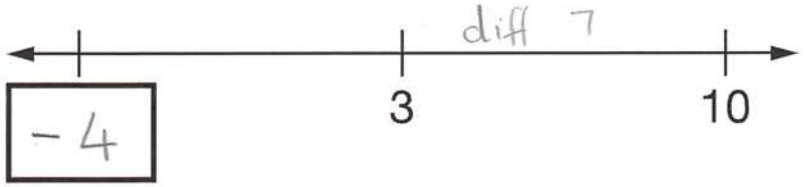


2 marks

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22 On this number line, 3 is **halfway** between the missing number and 10

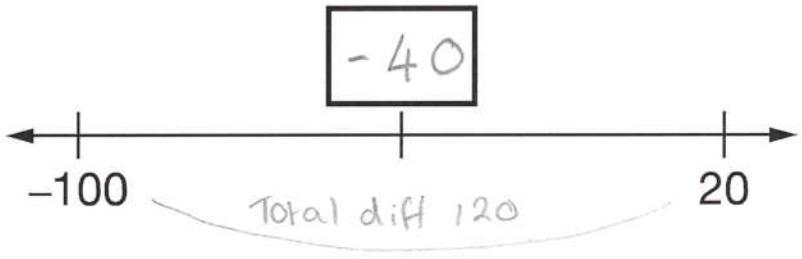
Write the missing number.



1 mark

3 - 7 = -4

What number is **halfway** between 20 and –100?



1 mark

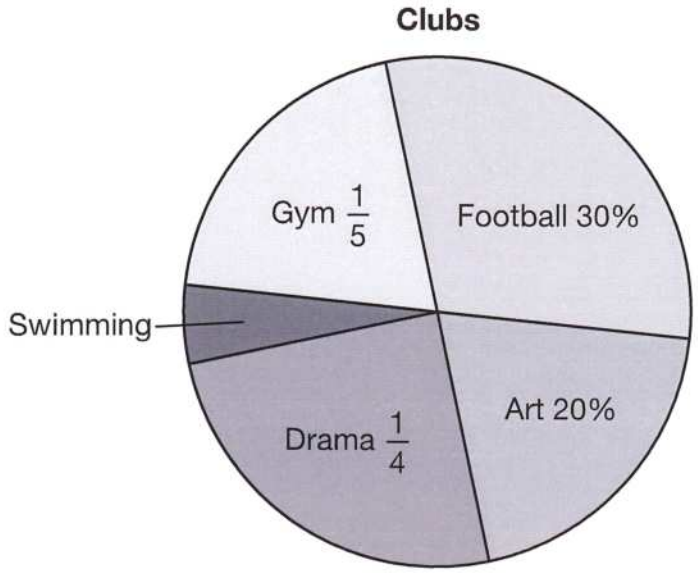
$\frac{1}{2}$ of 120 = 60

-100 + 60 = -40

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23 William asked some children to choose their favourite club.

The pie chart shows the results.



Three children chose swimming.

How many children did William ask **altogether**?

Show your method

30% + 20% = 50%

$\frac{1}{4}$ = 25%

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

Swimming = 5%

3 = 5%

So 6 = 10%

60 = 100%

60 **children**

2 marks

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B 0 0 0 7 0 A 0 2 2 2 4

[END OF TEST]

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