

Name: Answers

5-a-day

Gold



1st October

Simplify  $\frac{15}{45}$

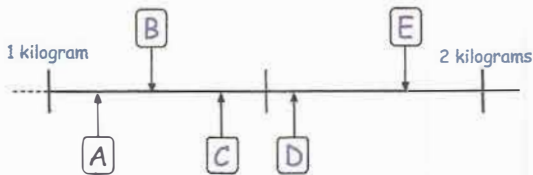
$\frac{1}{3}$

$7.59 - 1.998$

$$\begin{array}{r}
 \phantom{6} \cancel{7} . \overset{10}{5} \overset{10}{9} \overset{10}{0} \\
 - 1 . \overset{10}{9} \overset{10}{9} \overset{10}{8} \\
 \hline
 5 . \overset{10}{5} \overset{10}{9} \overset{10}{2}
 \end{array}$$

5.592

Here are five letters on a scale



Match each letter to one of the masses in the list

1410 g

C

1.11 kg

A

1.8 kg

E

$1\frac{1}{4}$  kg

B

1550 g

D

Three whole numbers add up to 40.

Magnus says,

"All three numbers must be even."

Is Magnus correct?



No, it could be  
2 odds and 1 even  
ie  $15 + 13 + 12 = 40$

Name: Angela

5-a-day

Gold



2nd October

$$\begin{array}{r} \phantom{\times} \phantom{2} 6 7 \\ \times \phantom{2} 4 4 \\ \hline \phantom{\times} 2 6 8 \\ \phantom{\times} 2 6 8 0 \\ \hline \phantom{\times} 2 9 4 8 \end{array}$$

2948

$$\frac{7}{8} - \frac{3}{4}$$

$$\frac{7}{8} - \frac{6}{8} =$$

$\frac{1}{8}$



Cheese  
£1.10 per 100g

$$\begin{array}{l} 200g \rightarrow \pounds 2.20 \\ 50g \rightarrow \pounds 0.55 \\ \hline \pounds 2.75 \end{array}$$

Work out the cost of 250g of cheese

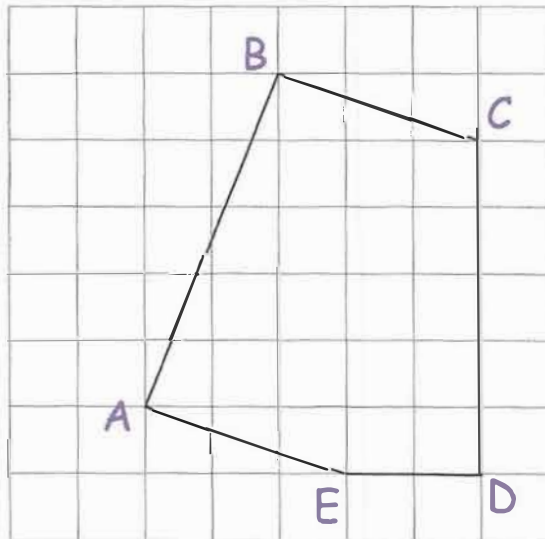
£2.75

Which two lines are **parallel**?

AB (BC) CD DE (EA)

Which two lines are **perpendicular**?

AB BC (CD) (DE) EA



Name: Answer

5-a-day

Gold



3rd October

$$\begin{array}{r} 1174 \\ 6 \overline{) 70424} \end{array}$$

1174

$$\frac{1}{10} \times 8$$

$$= \frac{8}{10} \text{ or } \frac{4}{5}$$

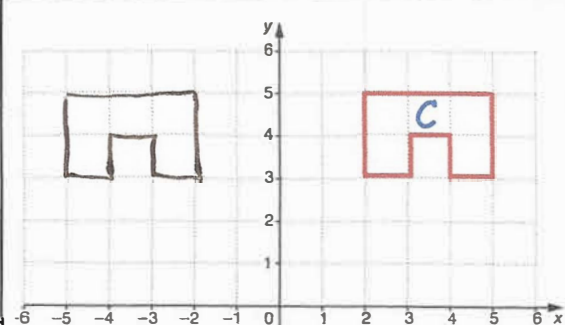
$\frac{4}{5}$

Three single-digit numbers multiply to make 448

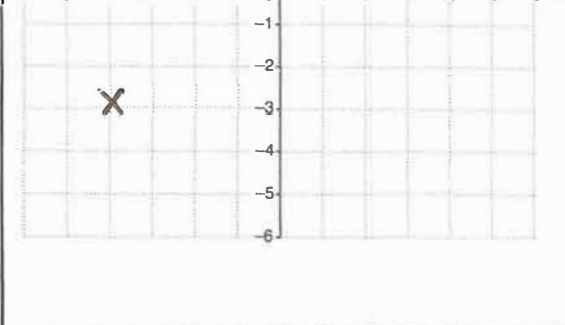
Write the missing numbers

$$\boxed{8} \times \boxed{8} \times \boxed{7} = 448$$

Plot the point  $(-4, -3)$



Reflect C in the y-axis





Name: Amwed

5-a-day

Gold



5th October

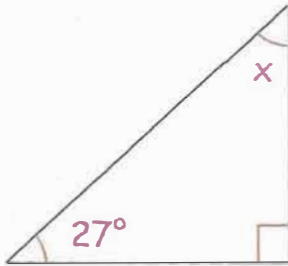
$0.3 \div 10$

0.03

$2.76 + 1.451$

$$\begin{array}{r} 2.76 \\ 1.451 \\ \hline 4.211 \end{array}$$

4.211



Calculate the size of angle x

$90 - 27 = 63$

$x = 63^\circ$

A box contains 1.8kg of rice  
 Laura uses 45 grams of rice for each meal.  
 She uses all the rice.

How many meals did Laura make?

40

$1.8\text{kg} = 1800\text{g}$

$1800 \div 45$   
 $= 40$



Hendrik has five coins.

Three of the coins add to £1.40  
 Three of the coins add up to £2.40

All five coins add up to £3.60

What are the coins that Hendrik has?

£2

£1

20p

20p

20p

Name: Answer

5-a-day

Gold



6th October

25% of 364

$$\begin{array}{r} 91 \\ 4 \overline{) 364} \end{array}$$

91

$$\begin{array}{r} 214 \\ 7 \overline{) 1498} \end{array}$$

214

Three coffees and a flapjack cost £7.35.

The cost of the flapjack was 90p

Work out the cost of four coffees.

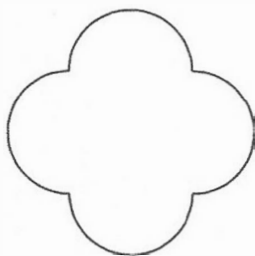
£8.60

$$7.35 - 0.90 = 6.45$$

$$6.45 \div 3 = 2.15 \text{ (1 coffee)}$$

$$2.15 \times 4 = \text{£}8.60$$

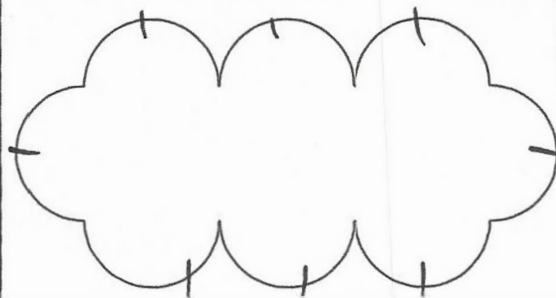
This shape is made from four identical curves



The perimeter of the shape is 72 centimetres

A new shape is made out of curves of the same size

$$72 \div 4 = 18$$



What is the perimeter of the new shape?

$$8 \times 18 = 144 \text{ cm}$$

Name: Answer

Primary 5-a-day

Gold



7th October

$$0.75 = \frac{3}{4}$$

$$\frac{3}{4}$$

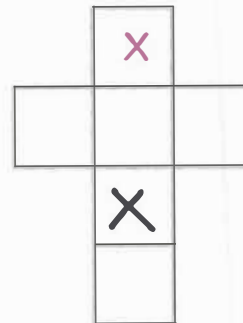
$$53 \times 18$$

$$\begin{array}{r} 53 \\ 18 \\ \hline 424 \\ 530 \\ \hline 954 \end{array}$$

$$954$$

Here is a net of a cube.

Draw one more cross so that the cube will have crosses on opposite faces



The population of London is 8,136,121

How many more people live in London than these four cities combined?

City	Population
Brighton	273,369
Preston	190,687
Birmingham	1,224,136
Telford	166,641

$$\text{total} = 1,854,833$$

$$8,136,121 - 1,854,833$$

$$\underline{6,281,288}$$



8th October

$13^2$

$3\frac{7}{12} = \frac{\square}{12}$

Hannah says

"there are more prime numbers between 1 and 10 than between 10 and 20."

Is Hannah right?

No

- 2 3 5 7  
11 13 17 19

Hannah has £700

She spends 15% of her money on a new guitar.

How much does Hannah spend on her guitar?

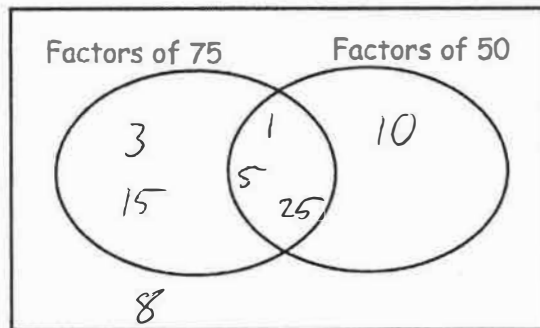


10% = £70  
5% = £35

£105

Write these numbers in the correct places on the diagram

1, 3, 5, 8, 10, 15, 25







9th October

$$\frac{13}{4} = 3\frac{1}{4}$$

1

$$\begin{array}{r} 8296 \\ - 67317 \\ \hline 21889 \end{array}$$

21889

$\frac{1}{2}$  of the cars in a car park are red  
 $\frac{1}{4}$  of the cars in the car park are blue

$$\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$$



What fraction of the cars in the car park are red or blue?

The mass of a 2p coin is 7.1 grams.  
 The mass of a 1p coin is half the mass of a 2p coin.



What is the total mass of these eight coins?

49.7g

$$\begin{array}{r} 6 \times 7.1 = 42.6g \\ + 7.1g \\ \hline 49.7g \end{array}$$

Here is a number written in Roman numerals

CXXXV

135

Write the number in figures



10th October

$$10^2$$

$$\frac{4}{5} - \frac{8}{15}$$

$$\frac{12}{15} - \frac{8}{15} = \frac{4}{15}$$

100

 $\frac{4}{15}$ 

Josie has 1.2 kilograms of flour.

She uses 0.75 kilograms of flour to make a cake.

How much flour does she have left?

0.45 kg

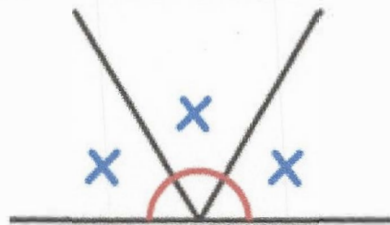
$$1.2 - 0.75 = 0.45 \text{ kg}$$



A straight line has been divided into 3 equal size angles.

Find the size of each angle

$$180 \div 3 = \underline{60^\circ}$$



Mrs Jenkins is a chicken farmer  
Her rectangular chicken pen is 18 metres long and 9 metres wide.  
Each chicken needs at least  $3\text{m}^2$  of space.

How many chickens can she keep?

54



$$18 \times 9 = 162$$

$$162 \div 3 = 54$$

Name: Ansver

5-a-day

Gold 

11th October

$$\begin{array}{r} \times 8 \\ 8 \quad 64 \\ \hline \square = \frac{\quad}{72} \\ \div 8 \end{array}$$

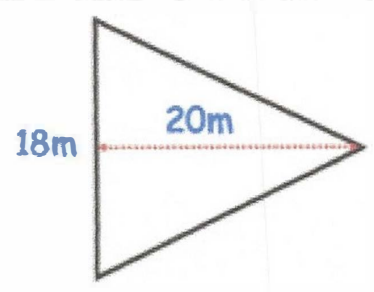
9

$$\begin{array}{r} 58002 \\ + 31019 \\ \hline 89021 \end{array}$$

89,021

Work out the area of the triangle

$$18 \times 20 \div 2 = \underline{180\text{m}^2}$$



20% of the children at a school are left handed.

There are 250 children at the school.

How many children are left handed?

50

$$10\% \text{ of } 250 = 25$$

$$20\% \text{ is } 25 \times 2 = 50$$

Write three factors of 40 that are **not** factors of 36

40: 1, 2, 4, 5, 8, 10, 20, 40

5      8      10

or 20 or 40



12th October

$8.9 \times 100$

Grid area for the first problem. The answer **890** is written in a box at the bottom right.

$$\begin{array}{r}
 39 \\
 \times 34 \\
 \hline
 156 \\
 1170 \\
 \hline
 1326
 \end{array}$$

Grid area for the second problem. The answer **1326** is written in a box at the bottom right.

Here is a list of numbers

8    11    14    16    25    27

From the list, write down the cube numbers

**8, 27**

Mr Smith makes a tower of 30 identical books.  
Mr Smith adds nine more books.

How tall is the tower now?

**351cm**

each book  $270 \div 30 = 9\text{cm}$   
 $9 \times 9 = 81\text{cm}$   
 $270 + 81 = 351$



Tick two numbers that are equivalent to  $\frac{3}{5}$

- 35%
- $\frac{30}{50}$
- 0.35
- 0.6



13th October

75% of 20

$$\begin{array}{r} \times 3 \\ 6 \\ \hline 18 \\ \times 3 \\ \hline 21 \end{array}$$

15

21

This week Harry spent  $\frac{2}{3}$  of his pocket money on a ticket for a match.

He also spent  $\frac{1}{9}$  of his pocket money on a scarf at the match.

What fraction of his pocket money has Harry spent?

$$\frac{2}{3} + \frac{1}{9} = \frac{6}{9} + \frac{1}{9} = \frac{7}{9}$$

Write the correct symbol in the box

>    =    <

$$\begin{array}{ccc} 2 - 3 & & 20 - 30 \\ -1 & & -10 \end{array} \quad \boxed{>}$$

Sarah has the same number of 2p coins as 5p coins.

Sarah has £2.10 in 2p coins.

How much money does Sarah have in total?

£7.35

\* £2.10 in 2ps is 105 coins

$$105 \times 5p = 525p$$

$$= \pounds 5.25$$

$$\pounds 5.25 + \pounds 2.10 = \pounds 7.35$$

Name: Anwen

Pri mary 5-aday

Gold



14th October

$$\begin{array}{r}
 \phantom{\times} \phantom{00} 93 \\
 \times \phantom{00} 74 \\
 \hline
 \phantom{\times} \phantom{00} 372 \\
 \phantom{\times} 6510 \\
 \hline
 \phantom{\times} 6882
 \end{array}$$

6882

$$50^3$$

$$50 \times 50 \times 50 = 125000$$

125,000

Over 20 days in February, it rained on 12 days.

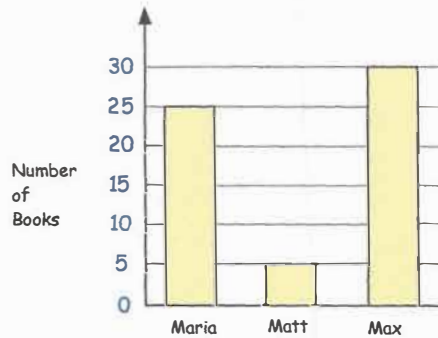
What fraction of the days were rainy?  
Simplify your answer.

$$\frac{12}{20} = \frac{3}{5}$$



Work out the mean number of books

$$\begin{aligned}
 25 + 5 + 30 &= 60 \\
 60 \div 3 &= \underline{\underline{20}}
 \end{aligned}$$



Grapes cost £3.20 per kilogram  
Blueberries cost £7 per kilogram

Work out the **total cost** of 250g of grapes  
and 100g of blueberries

£1.50

$$\begin{aligned}
 250g \text{ grapes} &: £3.20 \div 4 = 80p \\
 100g \text{ blueberries} &: £7 \div 10 = 70p \\
 80p + 70p &= £1.50
 \end{aligned}$$



15th October

Simplify  $\frac{18}{22}$


$\frac{9}{11}$

$-12 + 7$

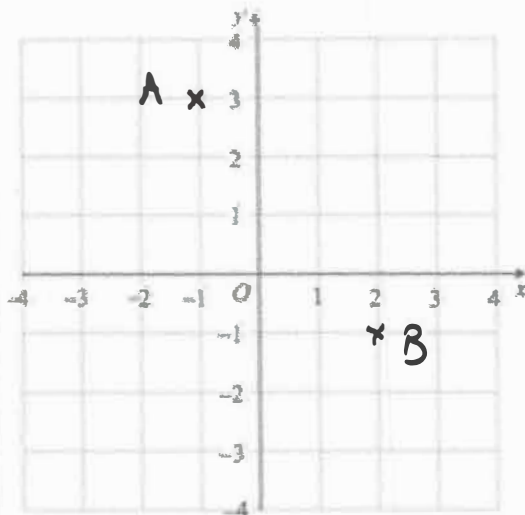

-5

Match up the equivalent mixed numbers and improper fractions.

$2\frac{1}{4}$	$2\frac{1}{3}$	$1\frac{3}{4}$	$3\frac{2}{3}$
$\frac{7}{4}$	$\frac{11}{3}$	$\frac{7}{3}$	$\frac{9}{4}$

Handwritten connections:  $2\frac{1}{4}$  to  $\frac{9}{4}$ ,  $2\frac{1}{3}$  to  $\frac{11}{3}$ ,  $1\frac{3}{4}$  to  $\frac{7}{4}$ ,  $3\frac{2}{3}$  to  $\frac{7}{3}$ .

Plot the point A (-1, 3)



Plot the point B (2, -1)

Name: Andrew

5-a-day

Gold



16th October

$$\begin{array}{r} 264 \\ 9 \overline{) 23576} \end{array}$$

264

20% of 30

6

Change 780 metres into kilometres

0.78 km

Change 0.02 kilograms to grams

20 grams

Circle all the prime numbers

(5) (7) 15 (17) 25 27

A 2p coin has a mass of 7 grams.

Find the total mass of £8 of 2p coins.

So 2p coins make £1

400 2p coins make £8

$$400 \times 7 = 2800 \text{ g}$$

or

$$2.8 \text{ kg}$$





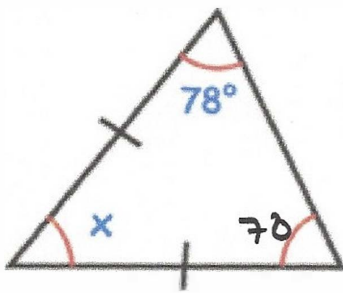
17th October

50% of 80

40

$$\begin{array}{r} 79 \\ 9 \overline{) 7181} \end{array}$$

79



$$\begin{aligned} 78 \times 2 &= 156 \\ 180 - 156 &= 24 \end{aligned}$$

Find the size of angle x.

$$\underline{x = 24^\circ}$$

Jessica has £600.

She gives 50% to her mother.

Jessica gives 10% to her brother.

She keeps the rest.

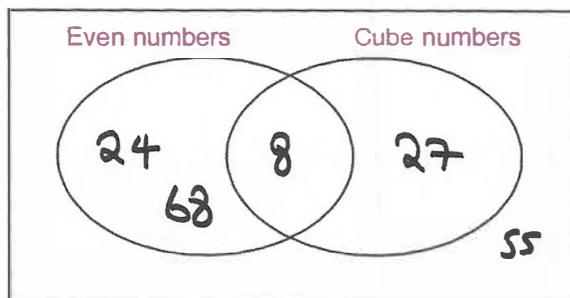
How much money does Jessica keep?

$$\begin{array}{r} \text{Mother} - \pounds 300 \\ \text{brother} - \pounds 60 \\ \hline \pounds 360 \end{array}$$

$$600 - 360 = \underline{\underline{\pounds 240}}$$

Write each number in the correct position on the diagram.

8    24    27    55    68



Name: Answer

5-a-day

Gold



18th October

$0.4 =$

40 %

$\frac{9}{10} + \frac{1}{2}$

$\frac{9}{10} + \frac{5}{10} = \frac{14}{10} = \frac{7}{5}$

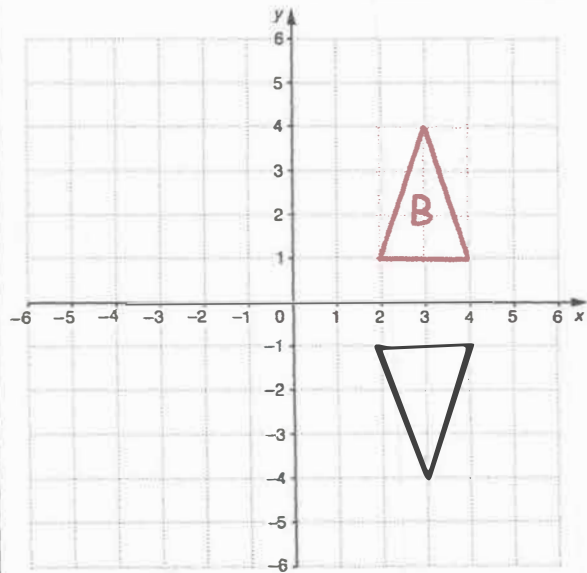
40 %

$\frac{7}{5}$  or  $1\frac{2}{5}$

Write down **all** the common multiples of 4 and 9 that are less than 100.

36, 72

Reflect triangle B in the x-axis



Name: Amelia

5-a-day

Gold



19th October

$$\frac{3}{8} - \frac{1}{4}$$

$$\frac{3}{8} - \frac{2}{8} =$$

$$\frac{1}{8}$$

$$8 \overline{) 936}$$

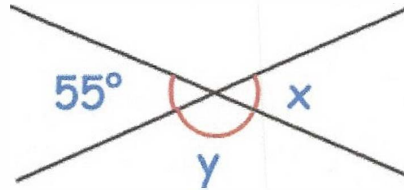
$$117$$

$x =$

$$55^\circ$$

$y =$

$$125^\circ$$



Write down 3 different fractions that are equivalent to  $\frac{3}{5}$

$$\frac{3}{5}, \frac{6}{10}, \frac{9}{15}, \frac{12}{20}, \dots$$

Sophie has £2.12  
Orla has 84p

How much money should Sophie give Orla so that they have the same amount of money?

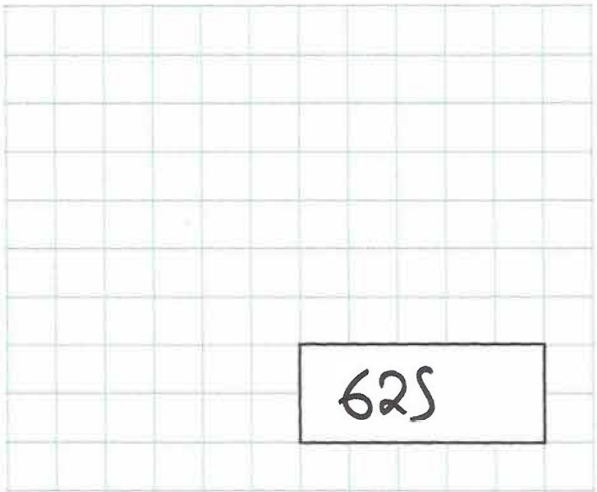
$$\underline{64p}$$

$$2.12 - 0.84 = 1.28$$

$$1.28 \div 2 = 0.64$$

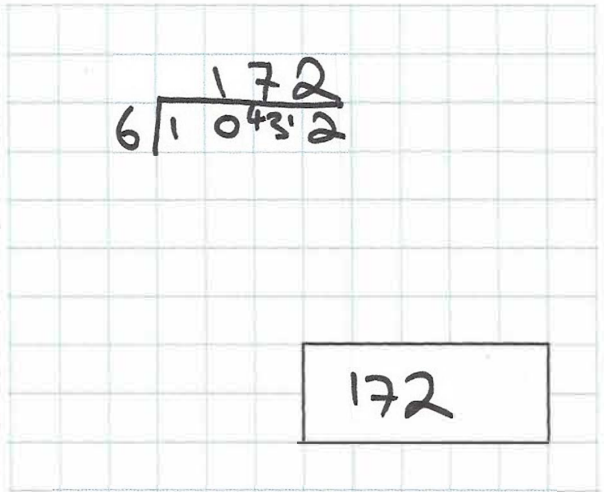
20th October

$5 \times 5 \times 5 \times 5$



625

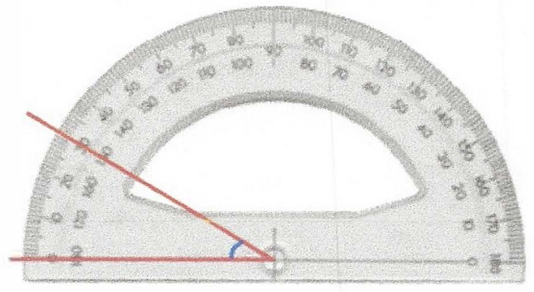
$1,032 \div 6$



172

Write down the size of the angle being measured.

30°



A group of 9 friends go on a coach tour.  
The total cost of the tour is £648

How much does each person pay?

£72

$9 \overline{) 648}$



Magnus has five coins

Three of the coins add up to £1.40  
Three of the coins add up to £2.40

All five coins add up to £3.60

What coins does Magnus have?

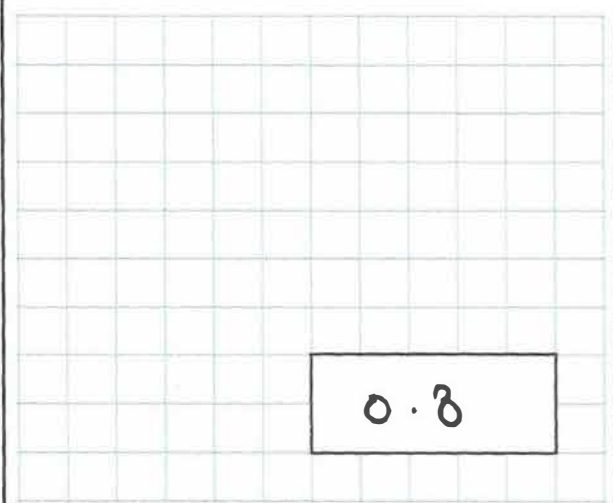
£1    £2

20p    20p    20p

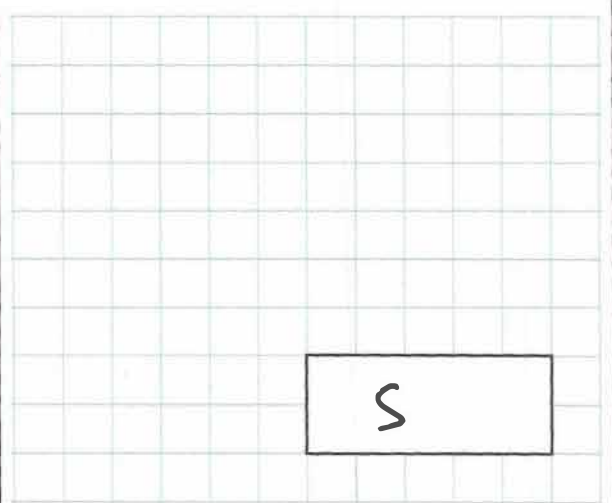
21st October

$0.08 \times 10$

$\frac{5}{2}$



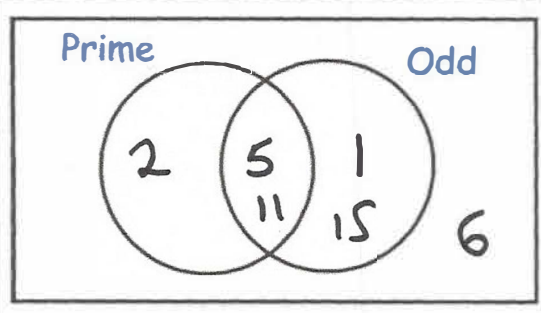
A grid with a box containing the handwritten answer  $0.8$ .



A grid with a box containing the handwritten answer  $5$ .

Write each number in its correct place

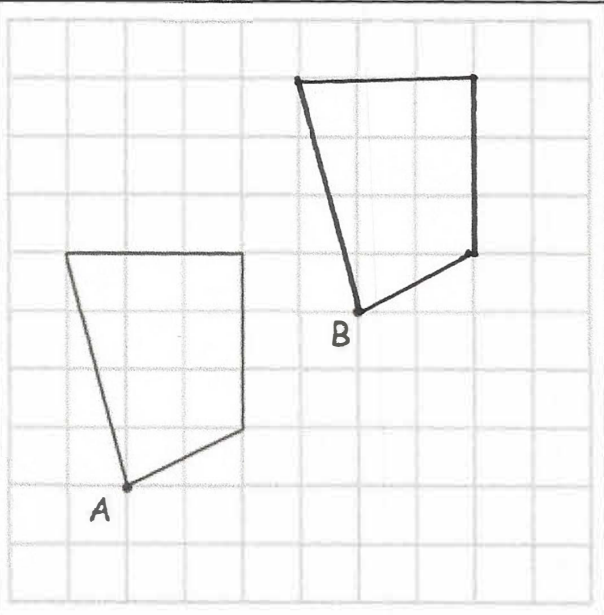
- 1    2    6    5    11    15



Here is a quadrilateral on a grid.

The quadrilateral is translated so that point **A** moves to point **B**.

Draw the quadrilateral in its new position.



Name: Ammon

5-a-day

Gold



22nd October

$-30 - 55$

Grid area for the subtraction problem. The result  $-85$  is written in a box at the bottom right of the grid.

$-85$

$$\begin{array}{r}
 68 \\
 \times 24 \\
 \hline
 272 \\
 1360 \\
 \hline
 1632
 \end{array}$$

Grid area for the multiplication problem. The result  $1632$  is written in a box at the bottom right of the grid.

$1632$

Write these numbers in order, starting with the smallest.

~~0.304~~ ~~0.41~~ ~~0.088~~ 2.1 ~~0.9~~

0.088, 0.304, 0.41, 0.9, 2.1

Large pizzas cost £6.25 each  
Small pizzas cost £4.80 each

Five children together buy two large pizzas and one small pizza.

They share the cost equally.

How much does each child pay?

$$\begin{array}{r}
 2 \times 6.25 = 12.50 \\
 + 4.80 \\
 \hline
 17.30 \\
 \hline
 17.30 \div 5 = \pounds 3.46
 \end{array}$$

Jack and Harry are waiters in a restaurant. They are both paid the same amount of money for each hour they work.

Jack worked 5 hours and is paid £32

Harry worked 7 hours

$\pounds 44.80$

How much is Harry paid?

$$\begin{array}{l}
 32 \div 5 = \pounds 6.40 \text{ per hour} \\
 6.40 \times 7 = \pounds 44.80
 \end{array}$$

Name: Angus

5-a-day

Gold



23rd October

75% of 600

Grid area for calculation of 75% of 600.

450

$9^2$

Grid area for calculation of  $9^2$ .

81

Jon and Callum have the same number of coins.

Jon has £9.40 in 20p coins.  
Callum has 50p coins.

How much money does Callum have?

$$9.40 \div 0.2 = 47 \text{ 20p coins}$$

$$47 \times 0.5 = \underline{\underline{\pounds 23.50}}$$

Emily has four pots of crayons.

Three of the pots have 10 crayons and the other pot has 6 crayons.

What is the mean number of crayons in a pot?

9

10, 10, 10, 6

$$\text{total} = 36$$

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

Saffron costs £6.18 per gram.

What is the cost of a tenth a kilogram of saffron

£ 618

$$1 \text{ gram} = \frac{1}{1000} \text{ kg}$$

$$1000 \text{ gram} = \frac{1}{10} \text{ kg}$$

$$6.18 \times 100 = 618$$





24th October

$$\begin{array}{r}
 105 \\
 \times 11 \\
 \hline
 105 \\
 1050 \\
 \hline
 1155
 \end{array}$$

1155

$$\frac{1}{3} + \frac{2}{15}$$

$$\frac{5}{15} + \frac{2}{15} =$$

$\frac{7}{15}$

List the first five prime numbers

2, 3, 5, 7, 11

An adult ticket for a football match is £9.00

A child ticket is 20% cheaper than an adult ticket.

How much is a child ticket?

£7.20

$$20\% \text{ of } \pounds 9 = \pounds 1.80$$

$$9 - 1.80 = \pounds 7.20$$

In Victoria's class, there are 20 students

Explain why Victoria must be wrong

Because 7 doesn't fit exactly into 20

Exactly  $\frac{2}{7}$  of the students in the class wear glasses.





Name: Ashwin

5-a-day

Gold



25th October

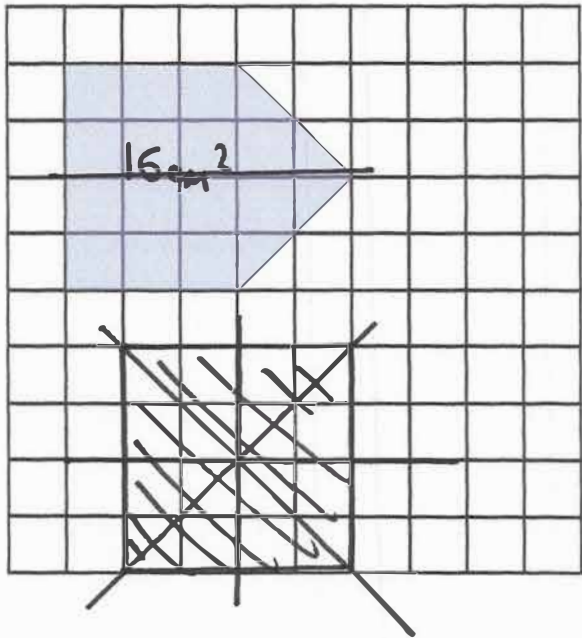
$2^3$

8

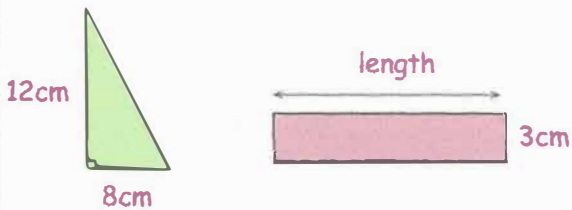
$0.7 = \frac{\square}{\square}$

$\frac{7}{10}$

On the grid, draw a **square** which has the **same area** as the pentagon



Draw any lines of symmetry on the **pentagon** and the **square**



The triangle and rectangle have the same area

Work out the length of the rectangle.

$12 \times 8 \div 2 = 48 \text{ cm}^2$

$48 \div 3 = \underline{16 \text{ cm}}$



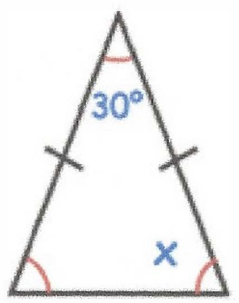
26th October

$$\begin{array}{r} 956 \\ 7 \overline{) 6692} \\ \underline{63} \phantom{0} \\ 39 \phantom{0} \\ \underline{35} \phantom{0} \\ 42 \phantom{0} \\ \underline{42} \\ 0 \end{array}$$

956

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

25%



Calculate the size of angle x

$$\begin{aligned} 180 - 30 &= 150 \\ 150 \div 2 &= 75 \\ \underline{x = 75^\circ} \end{aligned}$$

In a bag, there are green, white and blue counter.

$\frac{1}{10}$  of the counters are green.

$\frac{3}{5}$  of the counters are white.

What fraction of the counters are blue?

$$\begin{aligned} \frac{1}{10} + \frac{3}{5} &= \frac{7}{10} \\ \underline{\frac{3}{10} \text{ are blue}} \end{aligned}$$

Write the number 315 in Roman numerals

CCCXV

Name: Amey

27th October

$$\begin{array}{r} \times 14 \\ 2 \overline{) 28} \\ \underline{11} \phantom{=} \\ 11 \phantom{=} \end{array}$$

$$11 \times 14 = 154$$

154

$$\begin{array}{r} 54 \\ 20 \overline{) 1080} \\ \underline{100} \phantom{0} \\ 80 \phantom{0} \\ \underline{80} \\ 0 \end{array}$$

54

What is the perimeter of this rectangle?

$$\begin{aligned} 5.7 + 5.7 + 3.46 + 3.46 \\ = \underline{18.32 \text{ cm}} \end{aligned}$$

5.7 cm

3.46 cm



Two of the fractions are equivalent

Circle the equivalent fractions.

$$\frac{2}{3} \quad \frac{12}{15} \quad \frac{9}{12} \quad \frac{16}{20} \quad \frac{6}{10}$$

Michael and Rosie each have a bottle of water.

Michael's bottle contains  $1\frac{3}{4}$  litres

Rosie's bottle contains 2.2 litres.

How many more **millilitres** of water does Rosie have than Michael?

$$\begin{aligned} 1\frac{3}{4} \text{ l} &= 1750 \text{ ml} \\ 2.2 \text{ l} &= 2200 \text{ ml} \\ \hline &450 \text{ ml} \end{aligned}$$

28th October

Simplify  $\frac{7}{28}$

Grid area for simplification. A box at the bottom contains the answer  $\frac{1}{4}$ .

$\frac{2}{5} =$  40 %

Grid area for percentage conversion. A box at the bottom contains the answer 40 %.

Write the correct symbol in each box to make the statements correct.

>   =   <

$12 \times 12$  >  $14 \times 10$

$80 \div 20$  >  $75 \div 25$

$60 \times 4$  =  $3 \times 80$

$120 \div 5$  <  $5^2$

Circle any pattern that has a line of symmetry

Four geometric patterns are shown. The top-right pattern, a square divided into four triangles with alternating shaded and unshaded triangles, is circled. The other three patterns (a horizontal row of four triangles, a vertical rectangle with two triangles, and a square with four triangles meeting at the center) are not circled.



29th October

$$\begin{array}{r}
 39 \\
 \times 38 \\
 \hline
 312 \\
 1170 \\
 \hline
 1482
 \end{array}$$

1482

$$25 \times 8 \times 7$$

$$25 \times 8 = 200$$

$$200 \times 7 = 1400$$

1400

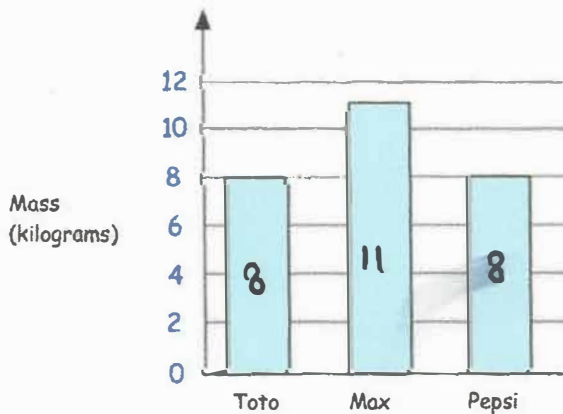
Work out the **sum** of 538,597 and 765,432

1,304,029

$$\begin{array}{r}
 538\,597 \\
 + 765\,432 \\
 \hline
 1\,304\,029
 \end{array}$$

Work out 25% of Toto's mass.

2kg



Work out the mean mass of the puppies.

$$8 + 11 + 8 = 27$$

$$27 \div 3 = 9 \text{ kg}$$



30th October

$14^2$

196

$\frac{1}{4} - \frac{3}{16}$

$\frac{4}{16} - \frac{3}{16} =$

$\frac{1}{16}$

Rhys buys 3 magazines.

- The first magazine cost £4.99
- The second magazine cost £3.45
- The third magazine cost £4.80

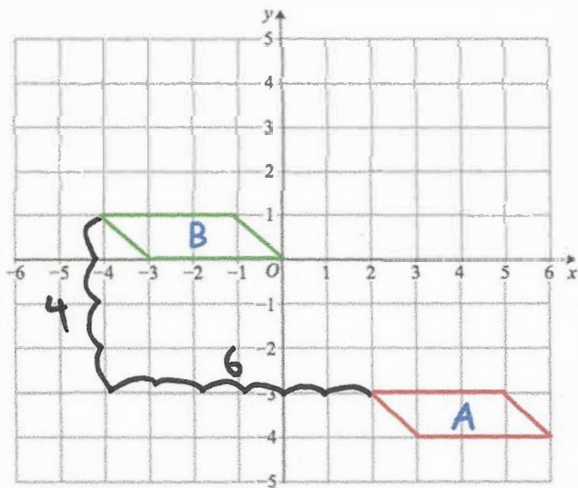
He pays with a £20 note.

£6.76

Work out how much change Rhys should receive.

total cost £13.24  
 $£20 - £13.24 = £6.76$

A parallelogram is translated from position A to position B



Complete the sentence

The parallelogram has moved  squares to the left

and  squares up



31st October

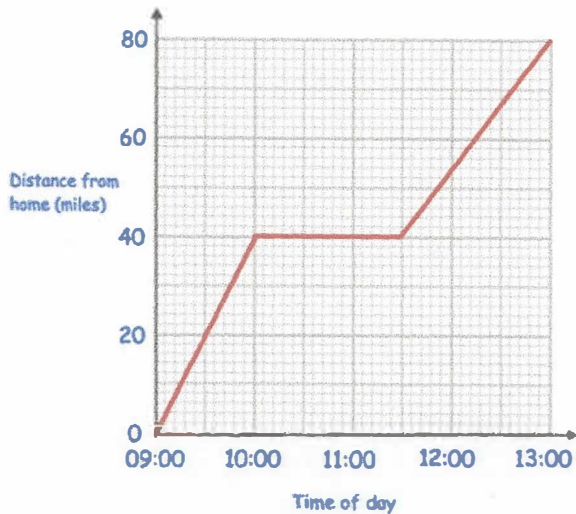
$$\begin{array}{r}
 64 \\
 \times 79 \\
 \hline
 576 \\
 4480 \\
 \hline
 5056
 \end{array}$$

5056

Simplify  $\frac{6}{9} \div 3 \rightarrow 2$   
 $\frac{9}{9} \div 3 \rightarrow 3$

$\frac{2}{3}$

Natalie travels from her home to London.



How far was Natalie from home when she visited Edward?

40 miles

How long did Natalie stop for?

1 1/2 h (1h 30 min)

She stopped and visited her friend Edward on the way.

Jack buys three pens.

He pays with a £20 note.  
His change is £13.49

How much would two pens cost?

£4.34

$$£20 - £13.49 = £6.51$$

$$2 \text{ pen cost } £6.51 \div 3 = £2.17$$

$$\therefore 2 \text{ pens cost } \underline{£4.34}$$