

Name: Answers

5-a-day

Gold



1st February

Simplify  $\frac{6}{9}$

75% of 40

$\frac{2}{3}$

30

Write these numbers in order, starting with the **smallest**

0.58 0.406 0.34 0.087 2.001

0.087, 0.34, 0.406,  
0.58, 2.001

Mr Smith puts up 8 shelves in his garage.  
Each shelf is 124cm long.

Work out the total length of wood Mr Smith  
needs for the 8 shelves.

Give your answer in metres.

$$\begin{array}{r} 124 \\ \times 8 \\ \hline 992 \text{ cm} \\ = 9.92 \text{ m} \end{array}$$

Round 194,712 to the nearest 1,000

195,000

Round 194,712 to the nearest 100

194,700

Name: Answers

5-a-day

Gold



2nd February

$$4^2$$

16

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

79

A snowboarder completes 3 somersaults in a jump.

How many degrees does she turn through in the jump?

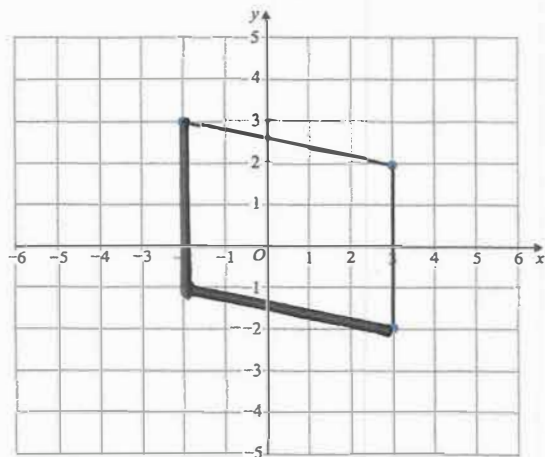
1080°



$$\begin{array}{l} 3 \times 360 \\ = 1080 \end{array}$$

Two sides of a parallelogram have been drawn.

Complete the parallelogram



How many lines of symmetry does the parallelogram have?

None



3rd February

$0.8 \times 1000$

800

$61,006 + 15,998$

$$\begin{array}{r} 61006 \\ + 15998 \\ \hline 77004 \end{array}$$

77004

List the factors of 26.

1, 2, 13, 26

A number in Roman numerals is L

Write L in figures

50

3 students sit a test.  
The total for the test is 40 marks.

Emily got 65% of the 40 marks

Rebecca got  $\frac{5}{8}$  of the 40 marks

Roisin got 27 out of 40 marks

$65\% \text{ of } 40 = 26$

$\frac{5}{8} \text{ of } 40 = 25$

so Roisin scored most

Name: Answers

5-a-day

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4th February

$$595 \div 7$$

$$\begin{array}{r} 87 \\ 7 \overline{) 595} \\ \underline{56} \phantom{0} \\ 35 \\ \underline{35} \\ 0 \end{array}$$

87

$$10^3$$

1000

20% of the children in a class are left-handed.

There are 30 students in the class.

How many children are right-handed?

24

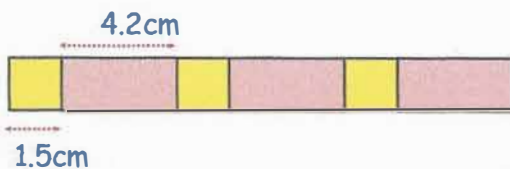
$$20\% \text{ of } 30 = 6$$

$$30 - 6 = 24$$

Write down the first 3 cube numbers

1, 8, 27, ...

Shown is a shape made from three identical squares and three identical rectangles.



Calculate the perimeter

$$\text{length} = 4.2 \times 3 + 1.5 \times 3 = 17.1$$

$$\text{width} = 1.5$$

$$P = 17.1 + 1.5 + 17.1 + 1.5 = \underline{\underline{37.2 \text{ cm}}}$$



5th February

$$\frac{2}{7} = \frac{6}{21}$$

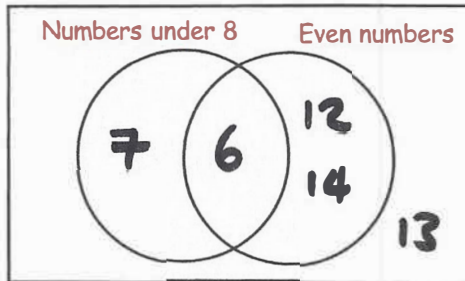
21

$$209 \times 1,000$$

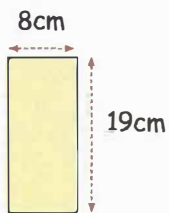
209,000

Put these numbers in the correct place on the diagram

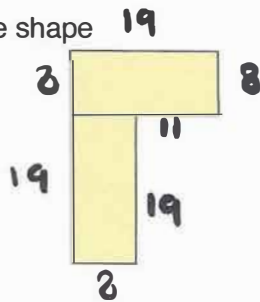
6 7 12 13 14



A shape is made from two rectangular tiles like this



This is the shape



Work out the area of the shape

$$19 \times 8 = 152$$

$$152 \times 2 = \underline{304 \text{ cm}^2}$$

Work out the perimeter of the shape

$$\underline{92 \text{ cm}}$$



6th February

$$5.1 - 3.24$$

$$\begin{array}{r} 4.10 \\ 5.10 \\ - 3.24 \\ \hline 1.86 \end{array}$$

1.86

$$2,063 \times 8$$

$$\begin{array}{r} 2063 \\ \times 8 \\ \hline 16504 \\ \phantom{1}52 \end{array}$$

16504

Circle two different numbers that multiply together to make 10 million.

10    100    1,000    10,000

100,000

Connor thinks of a number

He divides it 3  
Then he adds 14.

His answer is the same as his starting number.

What number did Connor start with?

21



20% of a number is 12

What is the number?

60

$$12 \div 2 = 6$$

$$6 \times 10 = 60$$



7th February

$$5^3$$

$$125$$

$$\frac{3}{4} + \frac{3}{20}$$

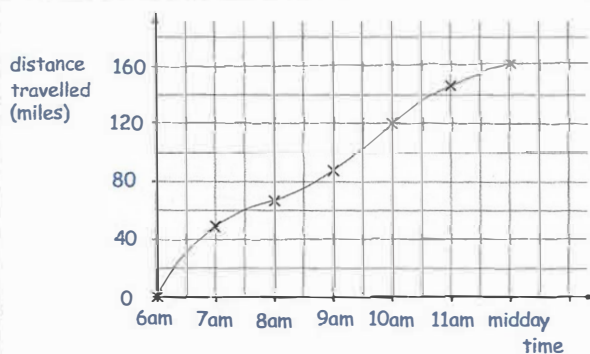
$$\frac{15}{20} + \frac{3}{20} = \frac{18}{20}$$

$$\frac{18}{20} = \frac{9}{10}$$

Almonds cost £1.20 per 100 grams

What is the cost of 450 grams of almonds?

$$\begin{array}{r} 1.20 \times 4 = 4.80 \\ + 0.60 \\ \hline \pounds 5.40 \end{array}$$



How far had the car travelled in total at 7am?

50 miles

How long did it take to drive the last 40 miles of the journey?

2 hours

Did the car travel faster between 7am and 8am or 9am and 10am?

9am and 10am



8th February

25% of 320

Grid area for the calculation of 25% of 320.

80

$\frac{7}{8}$  of 1,080

Handwritten calculations on a grid:

$$1080 \div 8 = 135$$

$$135 \times 7 = 945$$

945

Here is a pattern of dots



Draw Pattern 4



How many dots will there be in Pattern 6?

21

Explain why there will **not** be a pattern that uses 120 dots.

There will always be an odd number of dots

Find three different numbers that are:

- a prime number
- two less than a square number

2

7

23



9th February

75% of 300

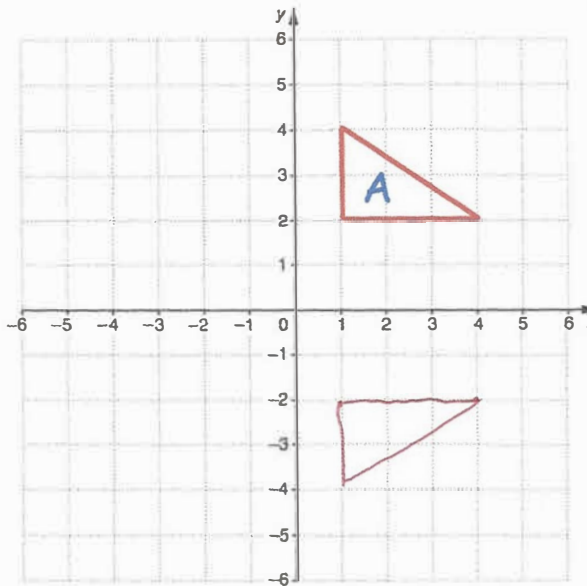
$$300 \div 4 = 75$$

$$75 \times 3 = 225$$

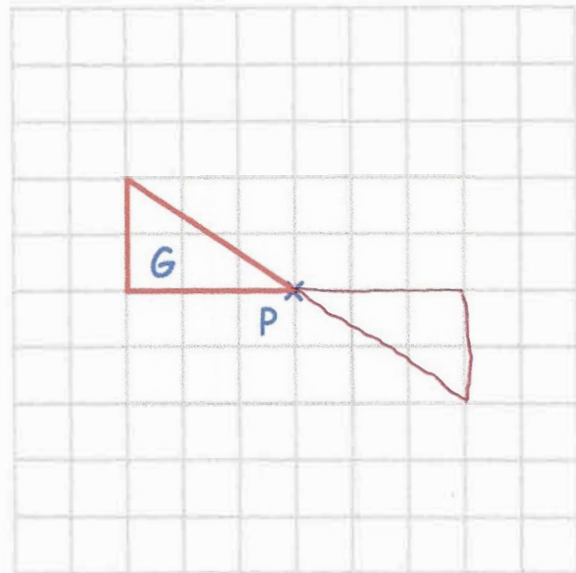
225

$1.05 \times 1,000$

1050



Reflect A in the x-axis



Rotate G 180° about P

Cafe Red sells 3 sandwiches for £5.25  
Sandwich World sells 4 sandwiches for £7.08

$$5.25 \div 3 = 1.75$$

$$7.08 \div 4 = 1.77$$



Which shop is better value for money?

Cafe red



10th February

$$51 - 63$$

$$\frac{2}{9} + \frac{2}{3}$$

$$\frac{2}{9} + \frac{6}{9} = \frac{8}{9}$$

$$-12$$

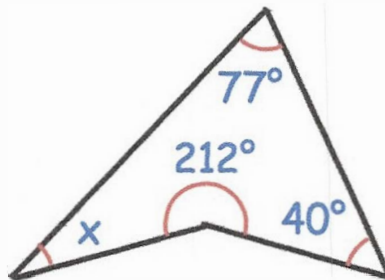
$$\frac{8}{9}$$

Find the size of angle x

$$212 + 77 + 40 = 329$$

$$360 - 329 = 31$$

$$x = 31$$



Write down 3 common multiples of 4 and 6.

12

24

36

8 drinks cost £12.

Work out the cost of 14 drinks.

$$12 \div 8 = \pounds 1.50$$

$$\pounds 1.50 \times 14 = \pounds 21$$



11th February

$$22,000 - 3,245$$

$$\begin{array}{r} 1199 \\ 22000 \\ - 3245 \\ \hline 18755 \end{array}$$

18755

$$0.75 \times 10$$

$$7.5$$

7.5

An adult ticket for a museum is £8.00

A child ticket is 30% cheaper than an adult ticket.

How much is a child ticket?

£5.60



Ben buys

3 teas at £1.80 each

2 soft drinks at £1.15 each

7 biscuits at 85p each

Ben shares the total cost equally between 5 people.

How much does each person pay?

$$1.80 \times 3 = 5.40$$

$$2 \times 1.15 = 2.30$$

$$7 \times 0.85 = + 5.95$$

$$13.65$$

$$13.65 \div 5 = \underline{2.73}$$

Circle the two fractions that are not

equivalent to  $\frac{2}{3}$ 

$$\frac{14}{21}$$

$$\frac{20}{33}$$

$$\frac{15}{25}$$

$$\frac{12}{18}$$



12th February

$$43 \times 80$$

$$\begin{array}{r} 43 \\ \times 80 \\ \hline 00 \\ 3440 \\ \hline \end{array}$$

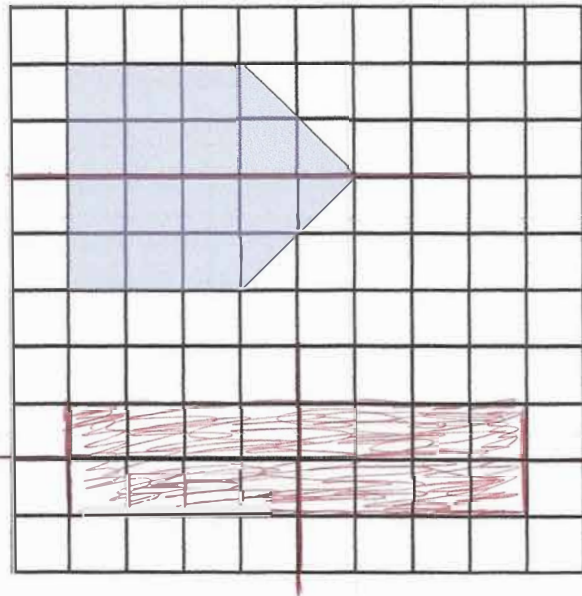
3440

$$25\% \text{ of } 300$$

75

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

16 squares



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

In Victoria's class, there are 30 students

Explain why Victoria must be wrong

$$\frac{2}{7} \text{ of } 30 \text{ is a decimal}$$

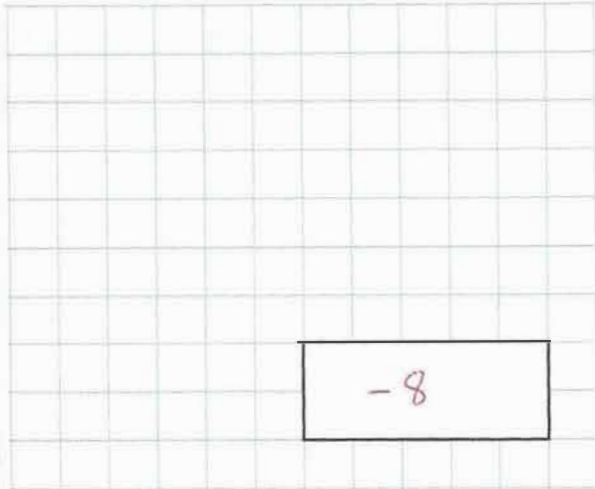
Exactly  $\frac{2}{7}$  of the students in the class wear glasses.





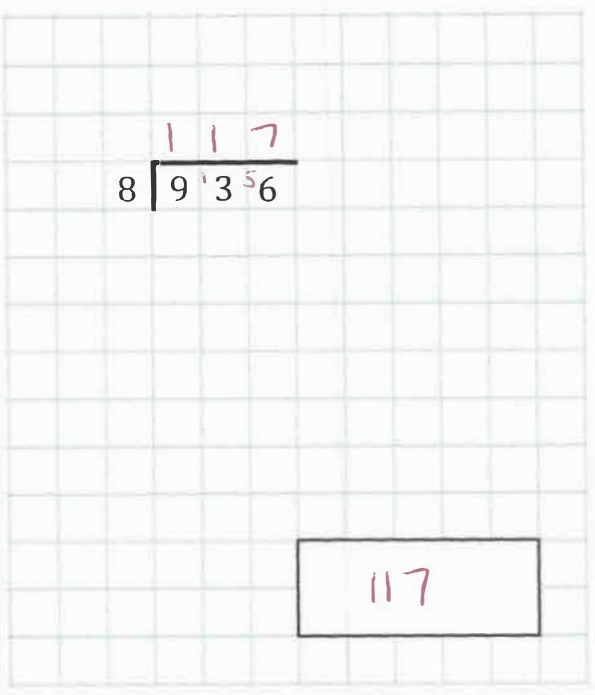
13th February

$-17 + 9$



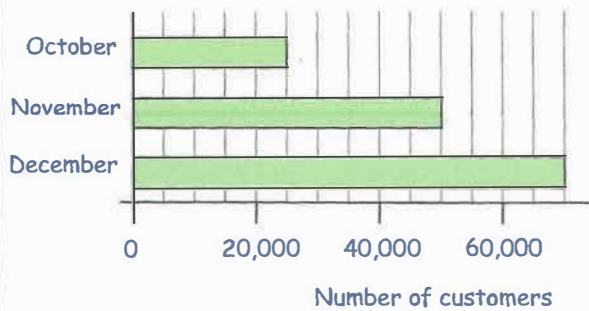
$-8$

$$\begin{array}{r} 117 \\ 8 \overline{) 936} \\ \underline{8} \phantom{00} \\ 13 \phantom{0} \\ \underline{8} \phantom{0} \\ 56 \\ \underline{56} \\ 0 \end{array}$$



117

This chart shows the number of customers that a shop had in 3 months.



How many customers did the shop have in total during the 3 months?

$$25000 + 50000 + 70000 = 145,000$$

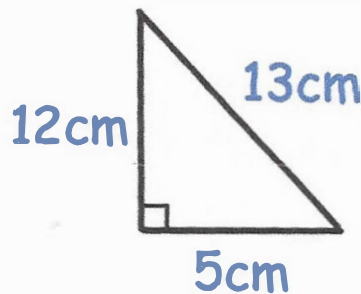
Alex says: "In November is a 100% increase in the number of customers than in October." Is he right?

yes

Work out the area of this triangle

$$5 \times 12 = 60$$

$$60 \div 2 = 30 \text{ cm}^2$$





14th February

$30.2 - 7.31$

Handwritten subtraction on grid paper:

$$\begin{array}{r} 29\overset{1}{} \\ 30\overset{2}{} - 7\overset{3}{} \cdot 31 \\ \hline 22\overset{8}{} \cdot 89 \end{array}$$

Answer box:  $22.89$

Handwritten multiplication on grid paper:

$$\begin{array}{r} 67 \\ \times 43 \\ \hline 201 \\ 2680 \\ \hline 2881 \end{array}$$

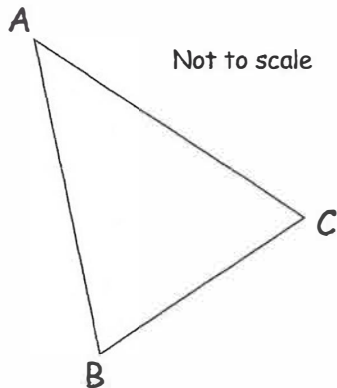
Answer box:  $2881$



Round the number on the calculator to the nearest whole number

$330$

ABC is an isosceles triangle.  
The perimeter of ABC is 30cm.



Work out the length of the side AC

$12\text{cm}$

Sides AB and AC are each **twice** as long as BC



15th February

Simplify  $\frac{20}{28}$

Grid area for simplification. A box at the bottom contains the handwritten answer  $\frac{5}{7}$ .

$760 \times 8$

Grid area for multiplication. Handwritten calculation shows  $760 \times 8 = 6080$ . A box at the bottom contains the handwritten answer 6080.

Work out the perimeter of this rectangle



Grid area for perimeter calculation. Handwritten calculation shows  $11.26 + 11.26 + 5.6 + 5.6 = 33.72 \text{ cm}$ .

Complete these fractions to make each equivalent to  $\frac{5}{6}$

Three fractions are shown with boxes for missing numbers:  $\frac{15}{\boxed{18}}$ ,  $\frac{\boxed{30}}{36}$ , and  $\frac{70}{\boxed{84}}$ .

Write the number 400 in Roman numerals

CD





16th February

$25 \times 7 \times 8$

$$\begin{array}{r} 25 \\ \times 56 \\ \hline 150 \\ 1250 \\ \hline 1400 \end{array}$$

1400

$1\frac{3}{4} = \frac{7}{4}$

7

Rebecca has two dogs, Lucky and Pepe. Lucky weighs 7.2 kilograms. Pepe is 900 grams lighter than Pepe.

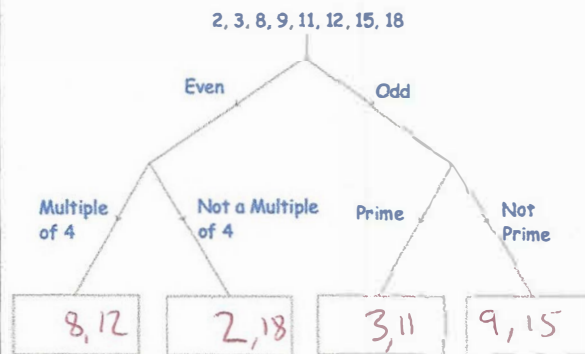
Work out how much both dogs weigh in total.

13.5 Kg

$$\begin{array}{r} 67200 \\ - 900 \\ \hline 6300 \end{array}$$

$$\begin{array}{r} 6300 \\ + 7200 \\ \hline 13500 \end{array}$$

Sort all the numbers into the correct boxes



James says all prime numbers are odd. Explain why James is wrong

2 is prime and even



17th February

$$18 \times 18$$

$$\begin{array}{r} 18 \\ \times 18 \\ \hline 144 \\ 180 \\ \hline 324 \end{array}$$

324

$$\frac{7}{9} \text{ of } 3,096$$

$$3096 \div 9 = 344$$

$$344 \times 7 = 2408$$

2408

Write these numbers in order of size, starting with the **smallest**

2.9    1.96    2.254    1.429

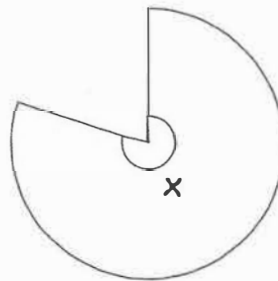
1.429, 1.96, 2.254, 2.9

This shape is **four-fifths** of a circle

How many degrees is **angle x**

$$360 \div 5 = 72$$

$$72 \times 4 = 288$$



not to scale

Georgia buys 7 books.

Each book costs £8.49.

How much money does she spend?

£59.43

$$8.49 \times 7 = 59.43$$



18th February

$$\begin{array}{r}
 28 \cancel{8} \cancel{9} \cancel{6} \cancel{4} \\
 - 19485 \\
 \hline
 18589
 \end{array}$$

18589

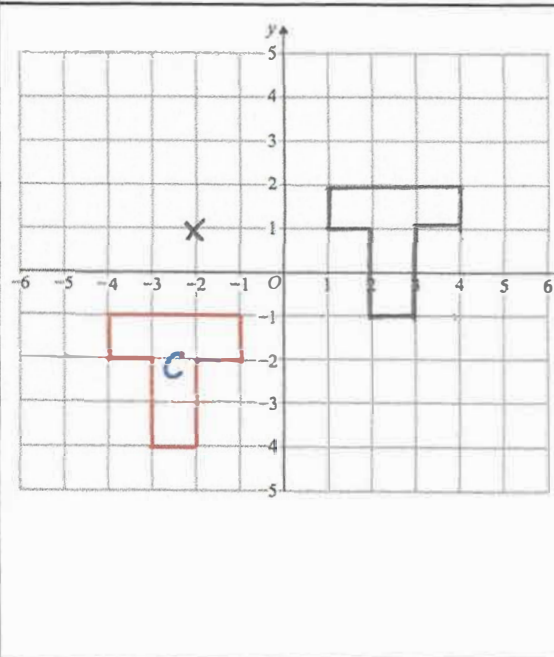
$985 \div 5 = 10,000 - \square$

$$\begin{array}{r}
 197 \\
 5 \overline{) 985} \\
 \underline{5} \phantom{0} \\
 48 \\
 \underline{45} \\
 35 \\
 \underline{35} \\
 0
 \end{array}$$

9803

A primary school has 312 children.  
 50% of the children are girls.  
 How many of the children are girls?

$$312 \div 2 = \underline{156}$$



The shape C is translated 5 **right** and 3 **up**  
 Draw the shape in its new position

Plot the point (-2, 1)

Name: Answers

5-a-day

Gold



19th February

25% of 420

$$50\% = 210$$

$$25\% = 105$$

105

$$\begin{array}{r} 1213 \\ 6 \overline{) 7278} \end{array}$$

1213

List all the factors of 32

1, 2, 4, 8, 16, 32

In each box, circle the number that is smaller

$2\frac{1}{2}$

2.3

$1\frac{1}{4}$

1.3

$3\frac{4}{5}$

3.6

$1\frac{11}{100}$

1.1

Shaun plays in some basketball matches. He scores the points below in each match

23 14 15 7 16

Work out the mean number of points scored

$$23 + 14 + 15 + 7 + 16$$

$$= 75$$

$$75 \div 5 = \underline{\underline{15}}$$





20th February

$1,302 \times 1,000$

**1,302,000**

$\frac{10}{7} = 1\frac{3}{7}$

**3**

Mr Jenkins is tiling a square floor.  
He uses 121 square tiles.

Work out how many tiles are in each row.

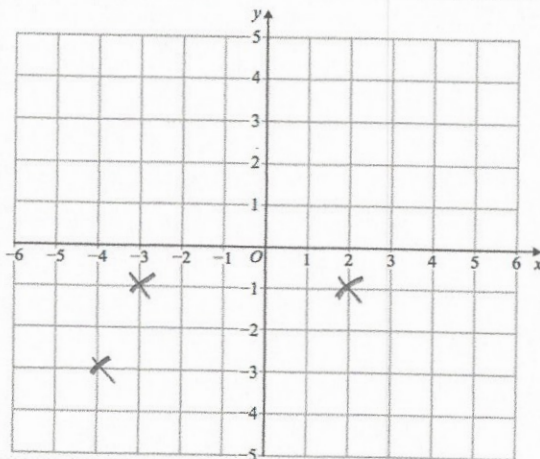
**11**

$\sqrt{121} = 11$

Ciara is drawing a parallelogram on the grid.  
She plots three points.

$(-4, -3)$   $(-3, -1)$   $(2, -1)$

Plot these points



Emily has one more point to plot.

Write down the coordinates of the fourth vertex of the parallelogram

**$(1, -3)$  OR  $(3, 1)$**

**either is correct**



21st February

$4.9 + 1.125$

$$\begin{array}{r} 1.125 \\ 4.9 \\ \hline 6.025 \end{array}$$

**6.025**

$\frac{2}{7} + \frac{1}{14}$

$$\frac{2}{7} = \frac{4}{14}$$

**$\frac{5}{14}$**

What is the **total** population of the three countries?

**63,650,797**

Country	Population
England	55,128,200
Scotland	5,408,923
Wales	3,113,674

In a quiz, each correct answer is worth 5 points and each wrong answer is worth -3 points.

A team answers 9 answers correctly and 6 answers incorrectly.

What is the team's final score? **27**

$9 \times 5 = 45$  ✓

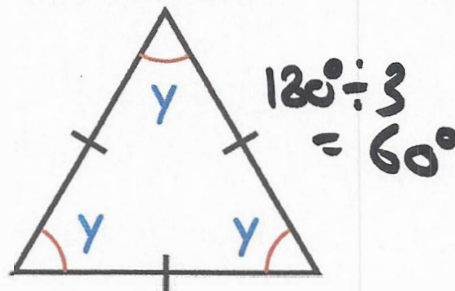
$6 \times -3 = -18$  ✗

$$\begin{array}{r} 45 \\ -18 \\ \hline 27 \end{array}$$

Here is an equilateral triangle.

Find  $y$

**60**





22nd February

$0.4 \div 10$

 $0.04$ 

Simplify  $\frac{10}{20}$

 $\frac{1}{2}$ 

Round 324,651 to the nearest 10,000

 $320,000$ 

Karl is baking a loaf of bread and needs 0.8 kg of flour.

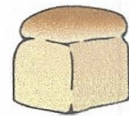
He has 72 grams of flour.

How much more flour does Karl need?  
Give your answer in grams.

$0.8 \text{ kg} = 800 \text{ g}$

$800 - 72$

$= 728 \text{ g}$

Work out the **difference** between the **sum** of 16 and 21 and the **product** of 16 and 21 $299$ 

$16 + 21 = 37 \text{ (sum)}$

$16 \times 21 = 336 \text{ (product)}$

$336 - 37 = 299$



Name: Answers

5-a-day

Gold



24th February

$2^3$

8

$235 \times 50$

$$\begin{array}{r} 235 \\ \times 50 \\ \hline 11750 \end{array}$$

11750

In a crate, there are 40 apples.

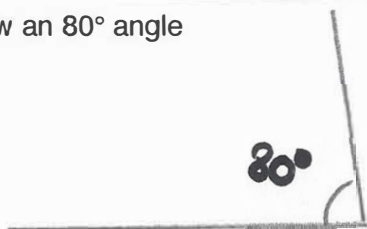
3 of the apples are bad.

What fraction of apples in the crate are good?

$$\frac{37}{40}$$



Draw an  $80^\circ$  angle



The input is the same as the output

Find the input

7

input  $\rightarrow$  multiply by 3  $\rightarrow$  subtract 14  $\rightarrow$  output

$$3x - 14 = x$$

$$2x = 14$$

$$x = 7$$



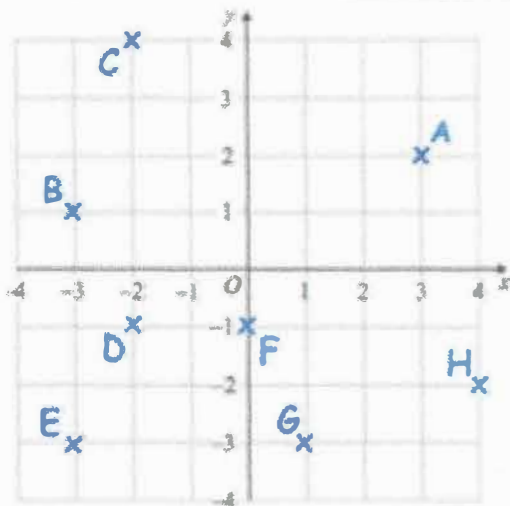
25th February

$41 - 100$

$1,834 \times 8$

Tom has 26 sweets.  
 He shares them equally between his friends.  
 Tom has more than 10 friends

Write down how many friends Tom might have.  
**either 13 or 26**



Write down the coordinates of the point B  
**(-3, 1)**

Write down the coordinates of the point G  
**(1, -3)**



26th February

$7 - 1.25 - 1.8$

$$\begin{array}{r} 6.75 \\ - 1.25 \\ \hline 5.50 \end{array}$$

$$\begin{array}{r} 45.95 \\ - 1.8 \\ \hline 3.95 \end{array}$$

3.95

$55 \times 44$

$$\begin{array}{r} 55 \\ \times 44 \\ \hline 220 \\ 2200 \\ \hline 2420 \end{array}$$

2420

A cake weighs 600g.  
40% of the cake is sugar.

Work out how many grams of sugar are in the cake.

240g

$10\% = 60g$   
 $40\% = 240g$



Write down three **odd** square numbers

1
9
25

(49, 81, 121, 169, 225...)

other possibilities include

Oscar spent  $\frac{1}{3}$  of his pocket money on a ticket for a rugby match.

He spent  $\frac{1}{9}$  of his pocket money on a scarf

What fraction of his pocket money has Oscar spent?

$$\frac{1}{3} + \frac{1}{9} =$$

$$\frac{3}{9} + \frac{1}{9} = \frac{4}{9}$$



27th February

$$34,280 - 5,703$$

$$\begin{array}{r} 34,280 \\ - 5,703 \\ \hline 28,577 \end{array}$$

28577

$$\square^2 + 3^2 = 45$$

$$3^2 = 9$$

$$45 - 9 = 36$$

$$6^2 = 36$$

6

Hailey has three pieces of rope.  
The pieces of rope are 2.35m, 1.9m and 4.08m.

Work out the total length of the pieces of rope.

8.33m

$$\begin{array}{r} 4.08 \\ 2.35 \\ 1.9 \\ \hline 8.33 \end{array}$$



Grapes cost £4.80 per kilogram  
Blueberries cost £8 per kilogram

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

£2

$$4.80 \div 4 = 1.20$$

$$8 \div 10 = 0.80$$

$$1.20 + 0.80 = 2$$

Find the length of the missing side

5cm



$$60 \div 12 = 5$$



28th February

2.561 + 3.64

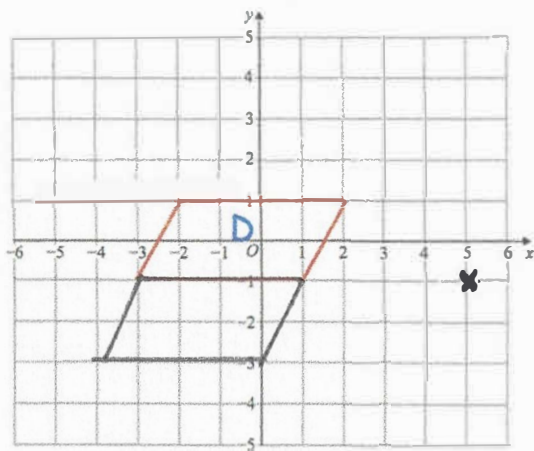
$$\begin{array}{r} 2.561 \\ 3.64 \\ \hline 6.201 \end{array}$$

6.201

$\frac{1}{2} + \frac{1}{8}$

$$\frac{1}{2} = \frac{4}{8}$$

$\frac{5}{8}$



The parallelogram D is translated  
1 left and 2 down

Draw the parallelogram in its new position

Plot the point (5, -1)

Miles and Megan buy 24 cans of fizzy drink.

Miles

24 cans at 62p each



Megan

Pack of 24 cans for £13.21



How much more money does Miles pay than Megan?

$$\begin{array}{r} 62 \\ \times 24 \\ \hline 248 \\ 1240 \\ \hline 1488 \end{array}$$

$$\begin{array}{r} 14.88 \\ - 13.21 \\ \hline 1.67 \\ \text{£}1.67 \end{array}$$

Name: Answers

5-a-day

Gold



29th February

$600 \div 1000$

0.6

$-100 + 21$

-79

Write the number 300 in Roman numerals

CCC

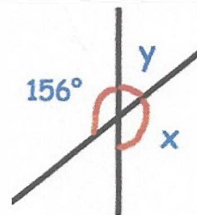


What size is angle x?

156°

What size is angle y?

$180 - 156 = 24^\circ$



Sophie says the angle below is 65°

Explain her mistake

She's read the outside scale, when she should have read 125°.

