

Name: Answer

5-a-day

Gold



1st July

Simplify  $\frac{25}{50}$

~~$\frac{25}{50}$~~   $\frac{1}{2}$

$15^2$

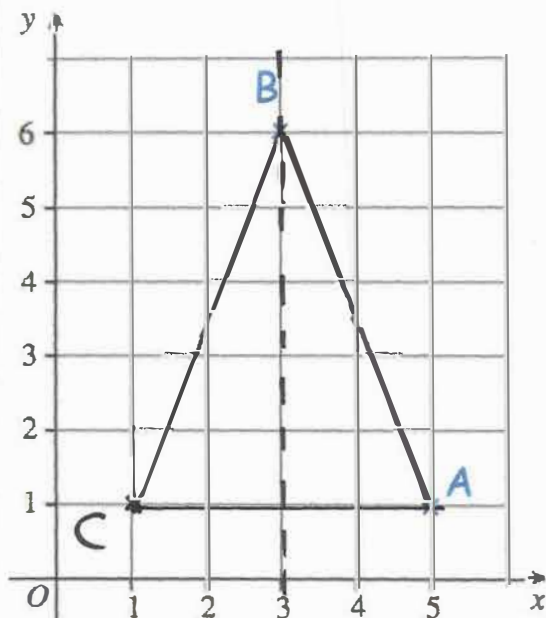
225

A, B and C are vertices of an isosceles triangle.

Write the coordinates of point C.

(1, 1)

Draw triangle ABC and draw any lines of symmetry



Two of the angles in a triangle are  $65^\circ$  and  $50^\circ$

Nancy says "The triangle is equilateral."

Explain why Nancy is **not** correct

To be equilateral,  
all 3 angles must  
be equal (and  $60^\circ$ )

Name: Answer

5-a-day

Gold



2nd July

$$\frac{1}{3} \times 5$$

$$\frac{5}{3} = 1\frac{2}{3}$$

$$\frac{5}{3} \text{ or } 1\frac{2}{3}$$

$$\frac{1}{2} + \frac{3}{10}$$

$$\frac{5}{10} + \frac{3}{10} = \frac{8}{10}$$

$$\frac{4}{5}$$

Holly is saving money for a guitar that costs £50

In January, she saves £20.90

In February, she saves £7.72

In March, Holly saves £12.39

Work out how much more money does Holly need to save?

$$\pounds 8.99$$



$$\text{total saved} = \pounds 41.01$$

$$50 - 41.01 = 8.99$$

Work out the mean of these numbers

150 216 84

$$\underline{150}$$

$$\text{total} = 450$$

$$450 \div 3 = 150$$

Round 419,527 to the nearest 1,000

420,000

Round 419,527 to the nearest 100

419,500

Name: Answers

5-a-day

Gold



3rd July

$6,000 \times 1,000$

6,000,000

$25\% \text{ of } 1,304$

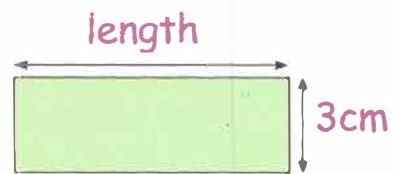
$$\begin{array}{r} 326 \\ 4 \overline{) 1304} \\ \underline{12} \phantom{0} \\ 10 \phantom{0} \\ \underline{8} \phantom{0} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

326

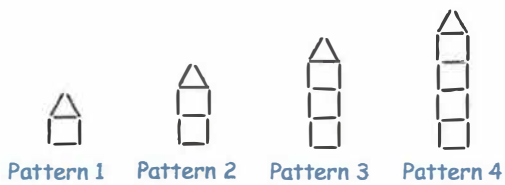
The area of this rectangle is  $24\text{cm}^2$

Work out the length of the rectangle

8cm



$24 \div 3 = 8$



Pattern 1

Pattern 2

Pattern 3

Pattern 4

6

8

12

15

Draw Pattern 5



How many sticks will be in Pattern 6?

21



4th July

$$\begin{array}{r} \div 13 \\ 2 \overline{) 26} \\ \underline{26} \\ 0 \end{array}$$

$$\begin{array}{r} \div 13 \\ \square \overline{) 65} \\ \underline{65} \\ 0 \end{array}$$

5

$$2387 \div 7$$

$$\begin{array}{r} 341 \\ 7 \overline{) 2387} \\ \underline{21} \phantom{00} \\ 28 \phantom{0} \\ \underline{28} \phantom{0} \\ 7 \\ \underline{7} \\ 0 \end{array}$$

341

Find the mean of this set of numbers

6, 6, 8, 10, 15

9

$$\text{total} = 45$$

$$45 \div 5 = 9$$

Hannah says

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

Is Hannah right? **No, there's**  
**4 in each case**

$$10-20: 11, 13, 17, 19$$

$$1-10: 2, 3, 5, 7$$

A cake weighs 800g.  
40% of the cake is sugar.

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

320g

$$10\% - 80$$

$$40\% - 320$$



Name: Answers

5-a-day

Gold



5th July

$8^2$

64

$91 \times 66$

$$\begin{array}{r} 91 \\ \times 66 \\ \hline 546 \\ 5460 \\ \hline 6006 \end{array}$$

6006

Ava bought three cups of coffee.

She pays with a £20 note.  
Her change is £12.44

What is the cost of **one** cup of coffee?

£2.52

$20 - 12.44 = 7.56$

$7.56 \div 3 = \text{£}2.52$

Write down three **even** square numbers

4

16

36

(64, 100, 144, ...)

Oscar spent  $\frac{1}{4}$  of his pocket money on a ticket for a rugby match.

He spent  $\frac{1}{12}$  of his pocket money on a scarf

What fraction of his pocket money has Oscar spent?

$$\frac{1}{4} + \frac{1}{12} =$$

$$\frac{3}{12} + \frac{1}{12} = \frac{4}{12} = \underline{\underline{\frac{1}{3}}}$$

Name: Answers

5-a-day

Gold



6th July

$$4^2 = 16$$

4

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

$$\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$$

$\frac{5}{8}$

Over 20 days in February, it was dry on 12 days.

What fraction of the days were rainy?  
Simplify your answer

$\frac{4}{7}$



$$\frac{16}{28} = \frac{4}{7}$$

Grapes cost £4.40 per kilogram  
Blueberries cost £9 per kilogram

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

£2

$$\begin{array}{r} \cancel{£}4.40 \div 4 = \cancel{£}1.10 \\ \cancel{£}9 \div 10 = \cancel{£}0.90 \\ \hline \pounds 2.00 \end{array}$$

Write the number 400 in Roman numerals

CD





7th July

Simplify  $\frac{6}{8}$ 

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

$$7 \times 18 \times 12$$

$$\begin{array}{r} 18 \\ \times 7 \\ \hline 126 \end{array}$$

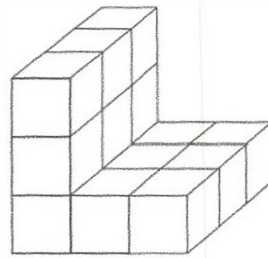
$$\begin{array}{r} 126 \\ \times 12 \\ \hline 252 \\ 1260 \\ \hline 1512 \end{array}$$

$$1512$$

The picture shows a shape made with cubes which each have a volume of  $1\text{cm}^3$

Find the volume of the shape

$$15\text{cm}^3$$



Jackie buys 8kg of flour.

She is making pizzas that each need 300g of flour.

What is the maximum number of pizzas that Jackie can make?

$$26$$



$$8000 \div 300$$

$$= 80 \div 3$$

$$= 26 \frac{2}{3}$$

$$26 \times 300 = 7800\text{g}$$

How much flour will Jackie have left?

$$200\text{g}$$

Name: Answers

5-a-day

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8th July

$$0.405 \times 10$$

4.05

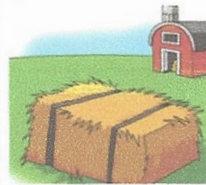
$$\begin{array}{r} 719 \\ 8 \overline{) 5752} \end{array}$$

719

A farmer has a field that is 200 metres long and 60 metres.

Work out the area of the field

$$\underline{12000 \text{ m}^2}$$



$$\begin{aligned} 200 \times 60 \\ = 12000 \end{aligned}$$

Work out the perimeter of the field

$$\underline{520 \text{ m}}$$

$$\begin{aligned} 60 + 200 + 60 + 200 \\ = 520 \end{aligned}$$

A bottle of cola holds 3 litres.

How many 120 millilitre glasses can be poured from the bottle?

25

$$3000 \div 120 = 25$$



Name: Answers

5-a-day

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9th July

$$70\% = \frac{7}{10}$$

$$\frac{7}{10}$$

$$\frac{8}{9} - \frac{1}{3}$$

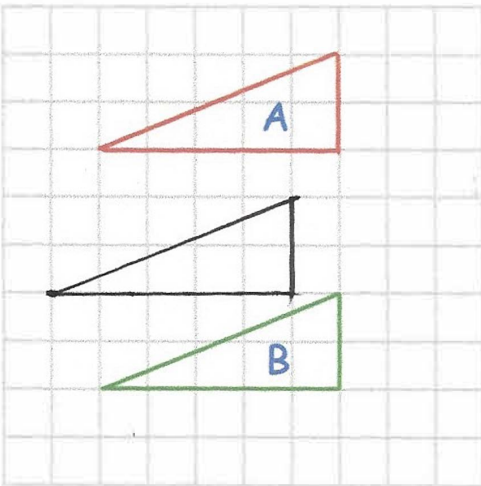
$$\frac{8}{9} - \frac{3}{9} = \frac{5}{9}$$

$$\frac{5}{9}$$

Write down the number that is **one thousand** less than **three million**

2,999,000

Triangle B has been translated to Triangle A



Complete this sentence

Triangle B has been translated

squares to the right and

squares upwards

Translate triangle B 1 square left and 2 squares upwards



Name: Answers

5-a-day

Gold



11th July

Simplify  $\frac{24}{36}$

$$= \frac{12}{18} = \frac{6}{9} = \frac{2}{3}$$

$\frac{2}{3}$

75% of 144

$$144 \div 4 = 36$$

$$36 \times 3 = 108$$

108

How many seconds are there in an hour?

$$60 \times 60 = 3600$$

How many hours are there in January?

$$31 \times 24 = 744 \text{ h}$$

These patterns are made of sticks



Pattern 1

4



Pattern 2

7



Pattern 3

10

Draw Pattern 4



13

Find the number of sticks in Pattern 6

19

Name: Answers

5-a-day

Gold



12th July

$11^2$

121

$85 \times 37$

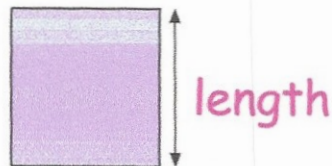
$$\begin{array}{r} 85 \\ \times 37 \\ \hline 595 \\ 2550 \\ \hline 3145 \end{array}$$

3145

The area of this square is  $36\text{cm}^2$

Work out the length of each side of the square

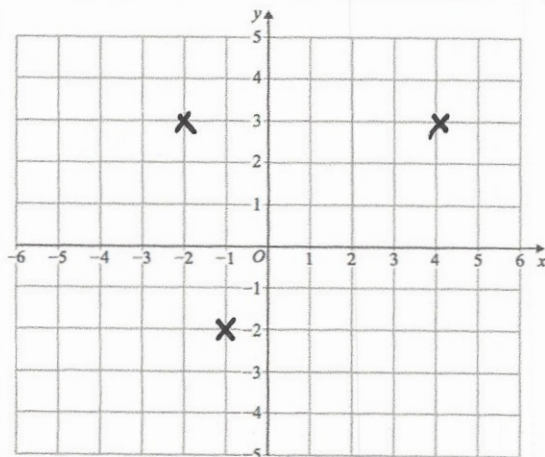
6cm



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

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

Plot these points



Kim has one more point to plot.

Write down the coordinates of the fourth vertex of the parallelogram

$(5, -2)$



13th July

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

$$5.61 - 3.77$$

$$\begin{array}{r} 45.81 \\ - 3.77 \\ \hline 1.84 \end{array}$$

$$\boxed{20\%}$$

$$\boxed{1.84}$$

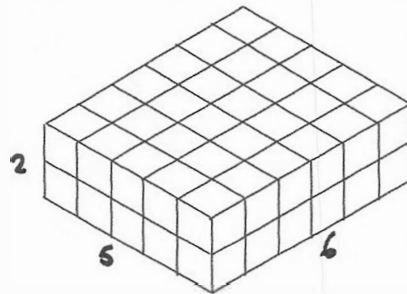
Write down all the square numbers between 10 and 40

16, 25, 36

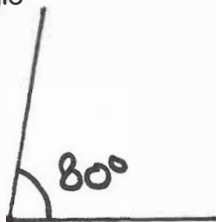
Each cube has a volume of  $1\text{cm}^3$

Work out the volume of the cuboid

$$2 \times 5 \times 6 = \underline{60\text{cm}^3}$$



Draw a  $80^\circ$  angle





Name: Answer

5-a-day

Gold



15th July

$$1.7 \div 100$$

0.017

$$8^3$$

512

Brendan earns £14 an hour.

He works 16 hours in one week.

He gives  $\frac{1}{10}$  of his total pay to his mum

How much money does he give to his mum?

$$16 \times 14 = 224$$

$$\frac{1}{10} \times 224 = \underline{\underline{22.40}}$$

Write down all the factors of 40

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

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

$\frac{1}{3}$  of the counters are green

$\frac{2}{9}$  of the counters are white

What fraction of the counters are blue?

$$\frac{1}{3} + \frac{2}{9} = \frac{5}{9}$$

$\frac{4}{9}$  are blue



16th July

$$2\frac{7}{8} = \frac{\square}{8}$$

$$\frac{23}{8}$$

40% of 200

$$10\% \text{ is } 20$$

$$40\% \text{ is } 20 \times 4 = 80$$

$$80$$

At the start of May, there were 6,886 toys in a shop.

During May,  
9,538 more toys were delivered  
11,736 toys were sold

How many toys were left in the shop at the end of May?

$$4688$$

Karl is baking a loaf of bread and needs 0.9 kg of flour.

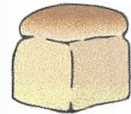
He has 85 grams of flour.

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

$$\underline{815g}$$

$$0.9 \text{ kg} = 900g$$

$$900 - 85 = 815g$$



Tia, Emily and Olivia share some sweets.

Tia has twice as many sweets as Olivia.  
Emily has four times as many sweets as Tia.

If Olivia has 8 sweets, how many sweets do they have altogether?

$$\text{Olivia } 8$$

$$\text{Tia } 8 \times 2 = 16$$

$$\text{Emily } 16 \times 4 = 64$$

$$\underline{\underline{\text{Total} = 88}}$$

Name: Answers

5-a-day

Gold



17th July

$4^2$

16

$1.2 \div 100$

0.012

The cost of hiring a bouncy castle is found by

$$\text{£}15 \times \text{number of hours}$$

Dylan hire the bouncy castle and the cost is £135

How long did he hire the bouncy castle for?

$$135 \div 15 = 9$$

9 hours

In a quiz, each correct answer is worth 7 points and each wrong answer is worth -6 points.

A team answers 9 answers correctly and 6 answers incorrectly.

What is the team's final score? 27

$$9 \times 7 = 63$$

$$6 \times -6 = -36$$

27



Work out the **difference** between the **sum** of 55 and 7 and the **product** of 17 and 18

244

$$55 + 7 = 62$$

$$17 \times 18 = 306$$

$$306 - 62 = 244$$

Name: Answer

5-a-day

Gold



18th July

$$0.08 \times 1,000$$

80

$$\begin{array}{r} 24 \\ 60 \overline{) 1440} \\ \underline{120} \phantom{0} \\ 240 \\ \underline{240} \\ 0 \end{array}$$

24

Round 371,527 to the nearest 10,000

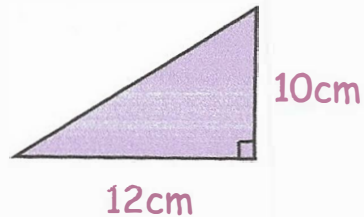
370,000

Round 371,527 to the nearest 1,000

372,000

Find the area of this triangle

$$10 \times 12 \div 2 = \underline{60\text{cm}^2}$$



3,100 people watched a match between Rovers and City.

10% of the fans are children

How many fans are adults?

2790

10% is 310

$$3100 - 310 = 2790$$

Name: Answers

5-a-day

Gold



19th July

$$-4 + 51$$

47

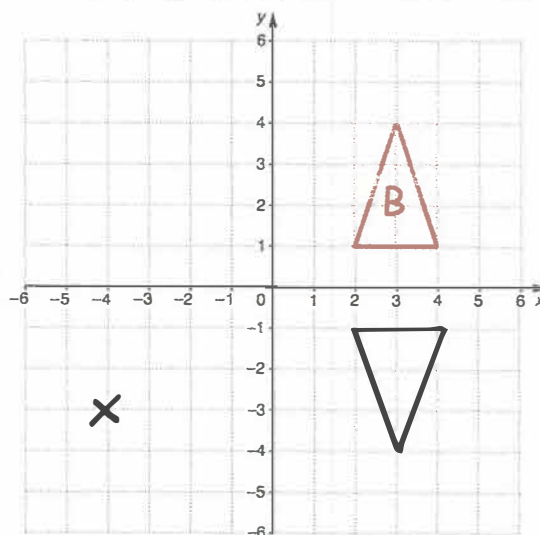
$$4^3$$

64

How many hours are there in the month of November?

$$30 \times 24 = 720$$

Reflect triangle B in the x-axis



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

Name: Answer

5-a-day

Gold



20th July

$$3^3 = 27$$

$$\frac{2}{3} + \frac{1}{6}$$

$$\frac{4}{6} + \frac{1}{6} = \frac{5}{6}$$

3

$\frac{5}{6}$

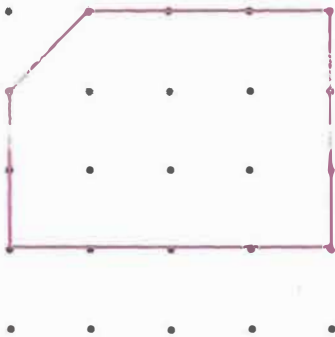
Change 1.4 litres into millilitres

1400 ml

Change 56 centimetres into metres

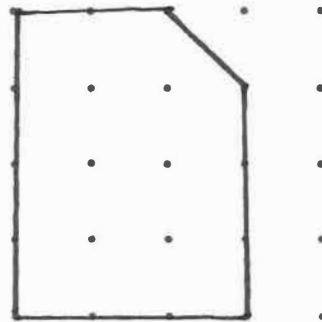
0.56 metres

Paul draws this shape on a grid



He turns his grid one quarter turn clockwise

Draw the shape in its new position after the turn



Name: Answers

5-a-day

Gold



21st July

$8 \div 100$

0.08

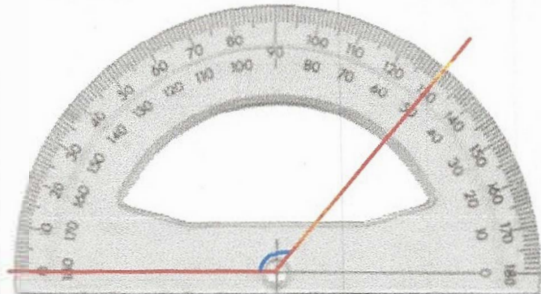
$5,067 \times 7$

$$\begin{array}{r} 5067 \\ \times 7 \\ \hline 35469 \end{array}$$

35469

What size is the angle being measured?

130°



A theatre has 75 rows.  
There are 24 seats in each row.

During a show at the theatre, there are  
180 empty seats

Work out how many people are watching  
the show

1620

$$\begin{array}{r} 75 \times 24 = 1800 \\ - 180 \\ \hline = 1620 \end{array}$$

Here is a number written in Roman  
numerals

CXXIX

129

Write the number in figures



22nd July

50% of 28

14

$$\begin{array}{r} 815 \\ 6 \overline{) 48930} \end{array}$$

815

A bus leaves Antrim Bus Station every 15 minutes.

A train leaves Antrim Train Station every 18 minutes.

At 8am a bus and a train leave the stations at the same time.

LCM of 15 and 18 is 90

When is the next time that a bus and a train leave at the same time?

90 mins = 1h30

9:30am



Jemima receives £5 pocket money.

She spends £3.

What percentage of the £5 does she have left?

40%

$$\frac{2}{5} = \frac{40}{100}$$

A **square** number and a **prime** number have a total of 17

What are the two numbers?

$$\boxed{4} + \boxed{13} = 17$$

square number    prime number

Name: Answers

5-a-day

Gold



23rd July

Simplify  $\frac{20}{50}$

$\frac{2}{5}$

$$\begin{array}{r} 87591 \\ + 86696 \\ \hline 174287 \end{array}$$

174287

The area of the rectangle is  $300\text{cm}^2$

Work out the width of the rectangle

$$300 \div 25 = 12\text{cm}$$



Connie prints booklets that each have 100 pages.

In total, she prints 70,000 pages.

How many booklets did Connie print?

700

$$\begin{array}{l} 70,000 \div 100 \\ = 700 \end{array}$$

Shannon writes down three **different** factors of 36.

She adds her three numbers together.

The answer is greater than 30 but less than 35.

(factors 1, 2, 3, 4, 6, 9, 12, 18, 36)

What three number could Shannon have written down?

18      12      4  
(for example)

Name: Answers

5-a-day

Gold



24th July

$$6 \frac{5}{6} = \frac{41}{6}$$

41

$$\begin{array}{r} \phantom{\times} \phantom{00} 87 \\ \phantom{\times} \phantom{00} 54 \\ \hline \phantom{\times} 348 \\ \phantom{\times} 4350 \\ \hline \phantom{\times} 4698 \end{array}$$

4698

At 1pm the temperature in York was 20°C  
At 3am the temperature was -6°C

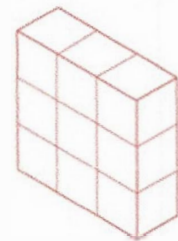
By how many degrees did the temperature fall?

26°C

Each cube has a volume of 1cm<sup>3</sup>

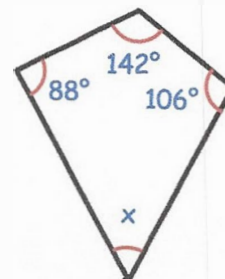
Write down the volume of the cube

9cm<sup>3</sup>



Find the size of angle x

x = 24°





25th July

$$-15 + 26$$

11

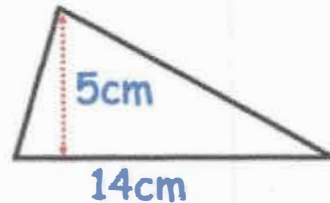
$$1\frac{1}{2} \times 4$$

$$\frac{3}{2} \times 4 = \frac{12}{2} = 6$$

6

Work out the area of this triangle

$$5 \times 14 \div 2 = \underline{35 \text{ cm}^2}$$



Find a multiple of 4 and a multiple of 5 that add up to make a multiple of 6.

(for example)

$$\boxed{8} + \boxed{10} = \boxed{18}$$

multiple of 4

multiple of 5

multiple of 6

Mr McClean wants to hire a taxi.  
He rings three different taxi companies  
and asks them for their prices.

A1 Taxis: A 5 mile journey costs £15  
Crazy Cabs: A 4 mile journey costs £13  
Value Cars: A 10 mile journey costs £28

Order the taxi companies from best to least value for money.

$$15 \div 5 = 3$$

$$13 \div 4 = 3.25$$

$$28 \div 10 = 2.80$$

1) Value  
2) A1  
3) Crazy

Name: Answer

5-a-day



26th July

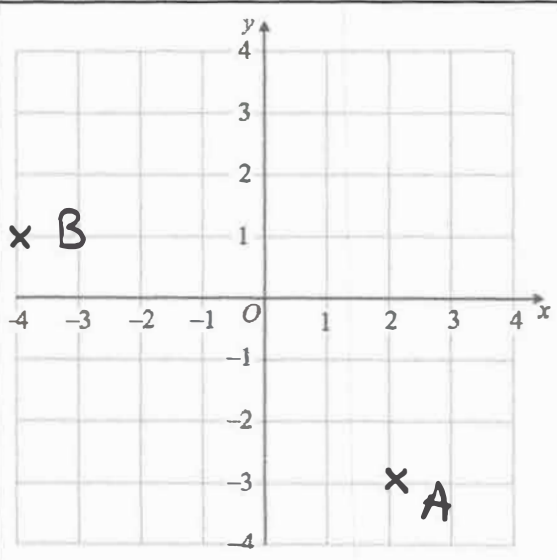
$$\begin{array}{r} \times 12 \\ 7 \square \\ \hline 8 \square 96 \\ \times 12 \end{array}$$

84

$$\begin{array}{r} 289108 \\ - 11301 \\ \hline 18707 \end{array}$$

18707

A is the point (2, -3)  
B is the point (-4, 1)  
Plot the points A and B



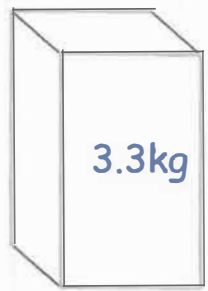
What is the special name of the point (0, 0)?

The origin

A box contains 3.3kg of rice.  
Laura uses 55 grams of rice for each meal.  
She uses all the rice.  
How many meals did Laura make?

60

$$\begin{aligned} 3.3\text{kg} &= 3300\text{g} \\ 3300 &\div 55 \\ &= 60 \end{aligned}$$





27th July

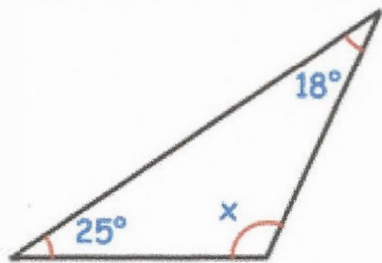
$$\frac{55}{7} = 7 \frac{6}{7}$$

6

$$303 \times 44$$

$$\begin{array}{r} 303 \\ \times 44 \\ \hline 1212 \\ 12120 \\ \hline 13332 \end{array}$$

13332



Calculate the size of angle x

$$18 + 25 = 43$$

$$180 - 43 = 137$$

$$\underline{x = 137^\circ}$$

Find two different prime numbers with a total of 15.

$$\boxed{2} + \boxed{13} = 15$$

prime number

prime number

Hannah finished a 10 kilometre race in 42 minutes 16 seconds.

Fiona finished 3 minutes 40 seconds **before** Hannah.

How long did Fiona take?

45	min	56	sec
----	-----	----	-----



28th July

$$0.15 = \boxed{15\%}$$

$$7^3$$

$$7^2 = 49$$

$$\begin{array}{r} 49 \\ \times 7 \\ \hline 343 \end{array}$$

$$\boxed{15\%}$$

$$\boxed{343}$$

Write down all the **common factors** of 12 and 20

1, 2, 4

12: 1, 2, 3, 4, 6, 12  
20: 1, 2, 4, 5, 10, 20

Kevin has £5000

He spends 15% of his money on a car.

How much does Kevin spend on the car?

£750

10% is 500

5% is 250

15% is 750



Patrick buys five football tickets.

Three of his tickets cost £40

The other two tickets cost £50

What was the **mean** cost of the tickets?

£44

$$3 \times 40 + 2 \times 50 = 220$$

$$220 \div 5 = 44$$

Name: Answer

5-a-day

Gold



29th July

$2 - 38$

$-36$

$\frac{3}{10} + \frac{2}{5}$

$\frac{3}{10} + \frac{4}{10} = \frac{7}{10}$

$\frac{7}{10}$

A farmer is packing trays of apples.

Each tray holds 8 apples.  
The farmer has 1,115 apples.

How many trays can the farmer fill?

139

$8 \overline{) 1115.0}$   
 $\underline{139.3 \dots}$

How many apples will be left over?

3

There are 16 pupils in a class.

The teacher has 7 litres of water.

She pours 140 millilitres of water for every pupil.

How much water is left over?  $4.76 \text{ L}$

$16 \times 140 = 2240 \text{ ml}$

$= 2.24 \text{ litres}$

$7 - 2.24 = 4.76$





30th July

Simplify  $\frac{40}{60}$

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

$\frac{2}{3}$

$\frac{7}{10}$

Gareth wants to use a mental method to calculate  $764 + 96$

He starts with 764

Here are some methods that Gareth could use.

Tick the methods that are **correct**

add 90 then add 6

add 90 then add 4

add 100 then subtract 4

add 100 then subtract 6

Write these fractions in order, starting with the **smallest**.

$\frac{2}{3}$     $\frac{4}{9}$     $\frac{6}{10}$

$\frac{60}{90}$     $\frac{40}{90}$     $\frac{54}{90}$   
 $\frac{4}{9}$     $\frac{6}{10}$     $\frac{2}{3}$



31st July

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

$$\frac{4}{7}$$

$$4,832 \times 6$$

$$\begin{array}{r} 4832 \\ \times 6 \\ \hline 28992 \end{array}$$

$$28992$$

The numbers in this sequence **decrease** by the same amount each time

108,205    108,105    108,005

What is the next number in the sequence?

107905

Tick the two numbers that are equivalent to  $\frac{1}{5}$

$$\frac{10}{50} \quad \checkmark$$

$$20\% \quad \checkmark$$

$$0.15 \quad \times$$

$$15\% \quad \times$$

A box contains trays of apples.

There are 12 apples in a tray.  
There are 4 trays in a box.

A shop buys 20 boxes of apples.

How many apples does the shop buy?

$$4 \times 12 = 48 \text{ apples per box}$$

$$20 \times 48 = \underline{960}$$

