1st August

2% of 9,000

\[ 0.\dot{6} = \frac{\text{ } }{\text{ }} \]

Write \( \frac{5}{8} \) as a decimal

Write \( \frac{13}{40} \) as a decimal

Dorothy has drawn a pie chart to show her friends’ favourite type of movie

<table>
<thead>
<tr>
<th>Genre</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comedy</td>
<td>26</td>
</tr>
<tr>
<td>Horror</td>
<td>14</td>
</tr>
<tr>
<td>Action</td>
<td>33</td>
</tr>
<tr>
<td>Drama</td>
<td>17</td>
</tr>
</tbody>
</table>

What has Dorothy has done wrong?

What size should the angle be for Comedy?
2nd August

<table>
<thead>
<tr>
<th>36 + 4 ÷ 2</th>
<th>539 × 109</th>
</tr>
</thead>
</table>

Sketch the net of a triangular prism

Use three of these fraction cards to complete the sum

Work out the volume of this cuboid
3rd August

\[
7,080 \div 60
\]

\[
\frac{3}{11} \div 2
\]

Draw two quadrilaterals with diagonals that do not cross at right angles.

The diagram shows 15 identical circles and a pink triangle.

The vertices of the triangles are at the centre of the circles.

Work out the area of the pink triangle.
4th August

20% of 14

Using the information that
87 \times 456 = 39672
write down the value of 870 \times 0.456

Jacob says that 0.7 is greater than \frac{5}{8}
Explain why he is correct

<table>
<thead>
<tr>
<th>Result</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Win</td>
<td>50%</td>
</tr>
<tr>
<td>Draw</td>
<td>36%</td>
</tr>
<tr>
<td>Lose</td>
<td>14%</td>
</tr>
</tbody>
</table>

Alfie makes a pie chart to show the results
What angle should he use for “lose?”
## 5th August

<table>
<thead>
<tr>
<th>Expression</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>$30 + 7^2 \times 2$</td>
<td>$9,614 \div 23$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagram</th>
<th>Find the size of angle $x$</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Regular Pentagon" /></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shown is a regular pentagon</td>
<td>Find the size of angle $x$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four bananas have a <strong>mean</strong> mass of 115g</td>
<td>What is the mass of the heaviest banana?</td>
</tr>
<tr>
<td>The heaviest banana is removed.</td>
<td></td>
</tr>
<tr>
<td>The <strong>mean</strong> mass of the remaining three bananas is 107g.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which is larger 30% of 8 or 8% of 30?</td>
<td></td>
</tr>
</tbody>
</table>

© Corbettmaths 2017
<table>
<thead>
<tr>
<th>6th August</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ \frac{1}{3} \times \frac{1}{3} \times \frac{1}{3} ]</td>
</tr>
</tbody>
</table>

There are 80 teachers in a school.

The headteacher says that exactly 36% of the teachers drive to work.

Explain why the headteacher is wrong.

Work out the value of \( y \)

\[ 2y - 16 = 80 \]

A red light flashes every 30 seconds and a green light flashes every 24 seconds.

They both flash at the same time.

After how many seconds will they next both flash at the same time?
<table>
<thead>
<tr>
<th>7th August</th>
</tr>
</thead>
<tbody>
<tr>
<td>573 \times 246</td>
</tr>
</tbody>
</table>

Find the size of angle x

Jake is making scones
Here is a list of ingredients to make 8 scones.

8 Scones
200g flour
30g caster sugar
50g butter
140ml milk
1 egg

How much of each ingredient would he need to make 10 scones?
8th August

9.03 ÷ 7

68% = \frac{\square}{\square}

Write down the ratio of red squares to green circles

Rebecca is \( \frac{1}{6} \) of Samuel's age.

Samuel is 7 years younger than Louise.

If Rebecca is 9 years old, how old is Louise?

Work out the missing number

\[ \square \div \frac{7}{15} = \frac{2}{3} \]
9th August

\(-40 \quad -55\)

\[0.8 \times 3,000\]

<table>
<thead>
<tr>
<th>Row 1</th>
<th>9</th>
<th>12</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 2</td>
<td>16</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Row 3</td>
<td>23</td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>Row 4</td>
<td>30</td>
<td>33</td>
<td>36</td>
</tr>
</tbody>
</table>

What number comes at the end of row 30?

Which row has a sum of 246?

Ben and Holly share 60 marbles in the ratio 2:3.

How many marbles does Holly receive?
10th August

\[ \frac{4}{25} \div 2 \]

15% of 7,000

The diameter of a circle is 7 cm.
What length is the radius?

Here are some planned school trips

<table>
<thead>
<tr>
<th>Number of students</th>
<th>Karting</th>
<th>Museum</th>
<th>Theme Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>221</td>
<td>342</td>
<td></td>
</tr>
<tr>
<td>Number of teachers</td>
<td>8</td>
<td>12</td>
<td>19</td>
</tr>
</tbody>
</table>

For every 18 students there must be at least 1 teacher.

Do all the trips have enough teachers?
<table>
<thead>
<tr>
<th>11th August</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0.225</strong> =</td>
<td>![Box]</td>
<td>![Box]</td>
</tr>
<tr>
<td><strong>( \frac{1}{2} \text{ of } \frac{3}{4} )</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Work out the shaded area

- William Shakespeare was born in 1564
  - Write 1564 in Roman numerals

- One gram of platinum costs £20.17
  - How much does **three fifths** of a kilogram cost?
12th August

50,500 \times 13

\frac{2}{3} = \boxed{\%}

In this diagram, the pink rectangles are all of equal width.

Calculate the width of one of the pink rectangles

Find the HCF (highest common factor) of 36 and 60
13th August

<table>
<thead>
<tr>
<th>$2^4$</th>
<th>$\frac{2}{3} + \frac{3}{5}$</th>
</tr>
</thead>
</table>

Lewis is walking from Antrim to Randalstown

<table>
<thead>
<tr>
<th>Randalstown</th>
<th>1¾ miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toome</td>
<td>9¼ miles</td>
</tr>
<tr>
<td>Antrim</td>
<td>3½ miles</td>
</tr>
</tbody>
</table>

Work out the distance from Antrim to Toome

Work out the distance from Randalstown to Toome

Write four numbers with a **mean** of 12 and a **range** of 12.
### 14th August

<table>
<thead>
<tr>
<th>120²</th>
<th>50 − 15 × 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On a map, 1cm represents 40km

The distance between two cities is 380km

On the map, what is the distance between the two cities?

The perimeter of a square is 36cm

Find the area of the square

Hugo calculates the size of each angle for a pie chart

<table>
<thead>
<tr>
<th>Destination</th>
<th>Frequency</th>
<th>Size of Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>15</td>
<td>3°</td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>11</td>
<td>2.2°</td>
</tr>
<tr>
<td>Further Education</td>
<td>40</td>
<td>8°</td>
</tr>
<tr>
<td>Gap Year</td>
<td>6</td>
<td>1.2°</td>
</tr>
</tbody>
</table>

\[15 + 11 + 40 + 6 = 72\]
\[72 \div 360 = 0.2° \text{ per person}\]

Can you spot what Hugo has done wrong?
### 15th August

<table>
<thead>
<tr>
<th>570 × 109</th>
<th>468 ÷ 18</th>
</tr>
</thead>
</table>

An adult ticket for the cinema is £13.00. A child ticket is half the price of an adult ticket. Mr and Mrs Henderson and their four children go to see a movie. Mrs Henderson has a voucher to save 20%.

How much does she have to pay for the tickets?

Find the area of the parallelogram

Two identical regular pentagons are shown.

Find angle $x$
16th August

\[ \frac{1}{3} - \frac{4}{5} \quad \text{1,000,090} - 531,998 \]

Arrange in order from smallest to largest

\[ \frac{3}{4}, \frac{2}{3}, \frac{5}{6}, \frac{1}{3} \]

Rosie has four different triangles

Complete the table to show the size of the angles in each triangle

<table>
<thead>
<tr>
<th>Type of Triangle</th>
<th>Angle 1</th>
<th>Angle 2</th>
<th>Angle 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scalene</td>
<td>20°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-angled</td>
<td></td>
<td>70°</td>
<td></td>
</tr>
<tr>
<td>Isosceles</td>
<td></td>
<td>50°</td>
<td></td>
</tr>
<tr>
<td>Isosceles</td>
<td></td>
<td></td>
<td>50°</td>
</tr>
</tbody>
</table>

Leah bought a new car costing £18,000
She paid a deposit of £4,000.

Leah paid the rest of the money over 50 equal monthly payments.

How much was each monthly payment?
17th August

\[
\frac{1}{2} \times 15 \quad \text{and} \quad 1,090 \times 25
\]

Round 10.6491 to one decimal place
Round 10.6491 to two decimal places

The diagonals of a square cross at right angles.

On the grid, draw a different type of quadrilateral where the diagonals cross at right angles

Solve the equation

\[5w + 11 = 3w + 20\]
### 18th August

**0.\overline{3} = \frac{3}{9}**

\[
\frac{2}{7} \times \frac{1}{2}
\]

**Measure this angle**

![Angle Image]

**A bus leaves Antrim Bus Station every 30 minutes. A train leaves Antrim Bus Station every 42 minutes. At 8am, a bus and a train leave the stations at the same time**

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

**Mr Kelly owns a shop**

He buys 31 televisions at £295.99 each and 19 DVD players at £60.99 each

Estimate how much Mr Kelly paid
19th August

<table>
<thead>
<tr>
<th>Simplify $\frac{750}{1250}$</th>
<th>$20 \times 30 \times 40 \times 3$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shown is an equilateral triangle with side length of 8cm. Six of the triangles are put together to make a larger shape. Find the perimeter of the larger shape.

Shown are four number cards.
The mean of the cards is 10.
Work out the missing number.

Tomas had some money
He spent £1.75 on a coffee.
He spent £2.55 on a muffin.
He has **five-sixths** of his money left.
How much money did Tomas have to **start with**?
20th August

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$-40 - 30$</td>
<td>$0.9 \times 3,000$</td>
</tr>
</tbody>
</table>

Find the area of the parallelogram

![Parallelogram with base 12 cm and height 8 cm]

Raspberries cost £13.30 per kg
Mangos cost £6.20 per kg
4 pineapples cost £5

Work out the cost of 10kg of raspberries, 7kg of mangos and 2 pineapples.

Molly thinks of a number.

She adds half of the number to a third of the number.

Her answer is 100.

What was the number Molly first thought of?
21st August

45% of 800

26 ÷ 5

Here is a net for a 3D shape

Which shape?

Burt is making cupcakes
He has made 700 cupcakes.
Burt places the cupcakes in boxes of 16.

How many boxes can he fill?

There are 48 students in a year group. The pie chart shows information about their eye colour.

How many students have brown eyes?
22nd August

\[ 11^3 \]

\[ \frac{\square}{400} = 0.5 \]

\[ 5a + 15 = 75 \]

Work out the value of \( a \)

The area of the triangle is \( 15cm^2 \)

Find the height of the triangle, \( x \)

\[ x \]

\[ 5cm \]

Cuboid A and cuboid B have the same volume.

Find the height of cuboid B, \( y \)
### 23rd August

<table>
<thead>
<tr>
<th>70% of 420</th>
<th>6,000 − 1,200 × 3</th>
</tr>
</thead>
</table>

| A 2p coin has a mass of 7 grams. |  |
| Find the total mass of £40 worth of 2p coins |  |
| Give your answer in kilograms |  |

| The product of Jack’s age, Florence’s age and Gabriella’s age is 784. |  |
| Jack is 7 years old and Gabriella is twice as old as Jack. |  |
| How old is Florence? |  |

| Triangle B is a reflection of triangle A in the y-axis. Both triangles are isosceles triangles. |  |
| What are coordinates of point C? |  |

© Corbettmaths 2017
### 24th August

<table>
<thead>
<tr>
<th><strong>Expression</strong></th>
<th><strong>Equation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>$275^2$</td>
<td></td>
</tr>
<tr>
<td>$\frac{1}{3} + \frac{3}{4} + \frac{1}{2}$</td>
<td></td>
</tr>
</tbody>
</table>

The diagram shows three regular octagons. There is a blue dot at the centre of each octagon.

What fraction of the diagram is unshaded?

The diameter of a circle is 1.9m.

What size is the radius of the circle?

Molly thinks of a number.

She adds half of the number to a third of the number. Her answer is 75.

What was the number Molly first thought of?
25th August

<table>
<thead>
<tr>
<th>0.16 × 300</th>
<th>55 − 9 × 2</th>
</tr>
</thead>
</table>

Measure this reflex angle

Some small circles and large circles fit exactly inside this rectangle.

The diameter of a small circle is 30cm.

Work out the radius of a large circle.
26th August

<table>
<thead>
<tr>
<th>78% = \boxed{\frac{}{}}</th>
<th>\frac{9}{10} \div 2</th>
</tr>
</thead>
</table>

Find the highest common factor (HCF) of 72 and 56

Here is a shape made from 4 identical rectangles.

The total area is 240 cm²

Work out the value of y
27th August

| 2072 ÷ 14 | \[
\begin{align*}
\frac{3}{4} + \frac{5}{7}
\end{align*}
|}

Samuel says that

\[6 + 4 \times 9 = 90\]

Is he correct?

Sofa World and Sofa Land charge to deliver pizzas.

**Sofa Land**

The delivery cost is always £10 no matter how far the sofa is delivered.

**Sofa World**

Describe the delivery cost of Sofa World.
### 28th August

**1.74 ÷ 12**

**1579 × 642**

<table>
<thead>
<tr>
<th>20</th>
<th>5</th>
</tr>
</thead>
</table>

Circle all the prime numbers

$$
\begin{array}{ccc}
7 & 17 & 19 \\
9 & 81 & 2 \\
1 & 27 & 99 \\
101 & 100 & 55 \\
\end{array}
$$

In this multiplication pyramid, two numbers are multiplied to give the number above.

Find the missing numbers

$$
\begin{array}{ccc}
45 & 108 & 6 \\
\end{array}
$$

Here are three equations

$$
\begin{align*}
  x + y + z &= 37 \\
  x + y &= 27 \\
  y + z &= 23
\end{align*}
$$

What are the values of x, y and z?

$$
\begin{array}{ccc}
  x = & y = & z = \\
\end{array}
$$
### 29th August

<table>
<thead>
<tr>
<th>(\frac{3}{8} = \ \ \ \ \ \ \ \ \ \ \ %)</th>
<th>1674 ÷ 31</th>
</tr>
</thead>
</table>

Colin runs at a speed of 8 metres per second.

How long will it take Colin to run 40 metres?

Find the value of \(y\)

\[7y + 5 = 4y + 20\]

I am thinking of a number that is not zero.

I **multiply** my number by \(-3\)

Tick the statement that is true.

- The answer must be positive
- The answer must be negative
- The answer could be positive or negative
30th August

\[
\frac{1}{5} - \frac{2}{3}
\]

65% of 30

Each quadrilateral has a perimeter of 40cm.

Complete the table

<table>
<thead>
<tr>
<th></th>
<th>Side Lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectangle</td>
<td>13cm 7cm 13cm 7cm</td>
</tr>
<tr>
<td>Rhombus</td>
<td>10cm</td>
</tr>
<tr>
<td>Parallelogram</td>
<td>12cm</td>
</tr>
<tr>
<td>Kite</td>
<td>6cm</td>
</tr>
</tbody>
</table>

Shay has £1000 to spend on lemon trees and plum trees.

Each lemon tree costs £18
Each plum tree costs £23

Shay buys 15 lemon trees.

How many plum trees can Shay buy?

Is the shape a regular pentagon?

Yes No

Find the size of angle x

© Corbettmaths 2017 www.corbettmaths.com
Adam is organising a charity concert at school.
The concert is sold out.
The hall holds 35 rows of 42 seats.
Each person pays £14

How much money will Adam raise for charity?

On the grid, draw a triangle with only one side of 4cm and a 90° angle

On the grid, draw a triangle with only one side of 4cm and only one 45° angle