1st March

\[
\frac{6}{7} \div 2
\]

In this rectangle, \(\frac{4}{9}\) is shaded purple
\(\frac{1}{5}\) is shaded green.

What fraction of the rectangle is not shaded?

\[ w = 17 \]

Work out \(6w + 7\)

The volume of the cube and the cuboid are equal.
Find the length of the cuboid.
2nd March

<table>
<thead>
<tr>
<th>15% × 2,000</th>
<th>2 1/2 × 17</th>
</tr>
</thead>
</table>

Mr Harris is tiling his bathroom floor. The bathroom floor is a rectangle measuring 4m by 2m. Each tile is 20cm by 20cm.

How many tiles does he need?

Find the lowest common multiple (LCM) of 5, 6 and 9

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### 3rd March

<table>
<thead>
<tr>
<th>0.07 \times 200</th>
<th>9% of 300</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This is a net for which 3D shape?

Concrete is made by mixing **cement**, **sand** and **gravel** in the ratio 1 : 2 : 3

How many kilograms of **cement** and **gravel** are needed to mix with 30 kilograms of sand?

_____kg of cement  _____kg of gravel

A white square is painted in one corner of a red square. Each side of the white square is a **third** of the length of the red square.

What is the area of the red section?

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### 4th March

<table>
<thead>
<tr>
<th>Numerical Expression</th>
<th>Fraction Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2 \frac{1}{4} + \frac{7}{8})</td>
<td>Circle any fraction that is greater than (\frac{1}{3}) but less than (\frac{1}{2})</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fractions</th>
<th>45% of 720</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\frac{4}{9})</td>
<td>(\frac{3}{5})</td>
</tr>
</tbody>
</table>

#### Geometry

In this diagram M is an equal distance from A and B.

What are the coordinates of M?

![Diagram](image)

#### Marble Problem

Owen has 3 marbles more than Mia.
Mia has 6 marbles more than Carl.

 Altogether they have 30 marbles.

How many marbles does each child have?

<table>
<thead>
<tr>
<th>Carl</th>
<th>Owen</th>
<th>Mia</th>
</tr>
</thead>
</table>

© Corbettmaths 2017
Some students sit a test. The test is out of 40 marks. The pass mark is 80%.

Martin 30 marks
Gina 35 marks
Ricky 31 marks
Vicky 38 marks
Chloe 29 marks

Work out the fraction of the students that passed the exam.

A toy grows when placed in a bucket of water. The toy doubles in size every minute. After 5 minutes the toy will half-filled the bucket.

After how many minutes will the toy fill the bucket?

A 10p coin has a diameter of 24.5mm.

Caitlyn makes a straight line of 10p coins worth £20.

How long is the line? Give your answer in metres.
## 6th March

### Arithmetic

<table>
<thead>
<tr>
<th>Expression</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>$80 - 24 \div 8$</td>
<td></td>
</tr>
<tr>
<td>$1 \frac{1}{5} - \frac{3}{4}$</td>
<td></td>
</tr>
</tbody>
</table>

### Word Problem

Jenny bought a car.
She paid a deposit of £855.
Jenny paid 48 payments of £185.
How much did the car cost Jenny in total?

### Number Puzzles

Barbara picks two odd number cards.
Denise picks two even number cards.
Barbara gives one of her cards to Denise.
Denise gives one of her cards to Barbara.
Barbara says "my cards are now both factors of 30."
Denise says "my cards are now both square numbers."

What numbers did they each start with?

**Barbara**: 8, 9, 10, 11, 12, 13, 14, 15, 16

**Denise**: 8, 9, 10, 11, 12, 13, 14, 15, 16
7th March

\[ 160 \times \frac{3}{5} \]

Find the shaded area

Find the highest common factor (HCF) of 28 and 70.

Mervyn drives for 13 hours.

His car uses 6.72 litres of diesel an hour.

How many litres of diesel does he use?
8th March

5,030,124 – 3,111,809

$
\begin{array}{cccc}
3 & 7 & 9 & 1 \\
\times & & & \\
\end{array}$

Sally recorded the number of cars in a car park at 9am, 11am, 3pm, 5pm and 7pm.

Estimate the number of cars in the car park at 10am.

The line graph shows her results

Estimate the number of cars in the car park at midnight

Shown is a regular decagon

Find the size of angle $x$
### 9th March

<table>
<thead>
<tr>
<th><strong>27 \times 3.1</strong></th>
<th><strong>5% of 510</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Grid with shapes drawn on three faces" /></td>
<td><img src="image2.png" alt="Grid with shapes drawn on three faces" /></td>
</tr>
</tbody>
</table>

**This cube has shapes drawn on three of its faces**

**The cube is turned to look like this. Draw and shade the missing shapes**

---

**A farmer says he has 2,500 sheep to the nearest 100.**

What is the greatest possible number of sheep that he has?
### 10th March

#### Expressions

1. \( \frac{4}{7} \times \frac{2}{3} \)

2. \( 40 \div (2 + 3) \)

#### Geometric Drawings

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

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

#### Area Calculation

Work out the area of the trapezium.

---

\[ \text{Area} = \frac{1}{2} \times (6 + 10) \times 5 \]

---

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<table>
<thead>
<tr>
<th>11th March</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>83 ÷ 4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Find the value of x</th>
<th>How much money does Kate spend on Rent and bills each month?</th>
</tr>
</thead>
<tbody>
<tr>
<td>( 7x - 6 = 71 )</td>
<td>How much money does Kate spend on <strong>other</strong> each month?</td>
</tr>
</tbody>
</table>

The pie chart shows how Kate spends her money each month. Kate spends £600 on food each month.

How much money does Kate spend on **Rent and bills** each month?
12th March

0.7 \times 5,000

1,309 \div 17

Find the lowest common multiple of 16 and 20.

A cuboid container is keep boxes.
Each box is a cube with side length 1m.
How many boxes can fit into the container?
13th March

90% × 900

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

Work out the missing number

Using different numbers, fill in the missing numbers below

The first 3 multiples of ___ add to 54

The first ___ multiples of ___ add to 54

Draw a 250° angle

Write the number 1960 in Roman numerals
14th March

1.83 × 9

| 3 | 5 | 4 | 3 | 4 | 0 |

James and Mark share 55 sweets in the ratio 2:3.

How many sweets does Mark get?

A logo is made from a square and 8 identical trapeziums.

Find the area of one trapezium

Find the total area of the logo.
15th March

Find the size of angle $x$

$c = 14$

Work out $3c - 19$

Shown are four number cards.
The mean of the four numbers is 12.
Find the missing number.

$\frac{1}{6} \div 3$

$16 \div 3$

$13$ $5$ $8$ $\square$
16th March

35% × 120

\[
\frac{\square}{180} = 0.1
\]

Each quadrilateral has a perimeter of 32cm.

Complete the table

<table>
<thead>
<tr>
<th>Side Lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rectangle</strong></td>
</tr>
<tr>
<td><strong>Rhombus</strong></td>
</tr>
<tr>
<td><strong>Parallelogram</strong></td>
</tr>
<tr>
<td><strong>Kite</strong></td>
</tr>
</tbody>
</table>

Find the value of y

\[6y + 4 = 3y + 22\]

Shay has £1000 to spend on lemon trees and plum trees.
Each lemon tree costs £18
Each plum tree costs £24
Shay buys 19 lemon trees.

How many plum trees can Shay buy?
17th March

A bus travels 120 miles at a speed of 40 miles per hour.

How long does the journey take?

What part of the circle is shown in red?

Two whole numbers multiply together to give an answer of 600.

Neither of the numbers contains the digit zero.

What are the two numbers?

14.688 \div 12

Two whole numbers multiply together to give an answer of 600.

Neither of the numbers contains the digit zero.

What are the two numbers?
18th March

<table>
<thead>
<tr>
<th>Expression</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>$945 \div 35$</td>
<td>27</td>
</tr>
<tr>
<td>$\frac{7}{8}$</td>
<td>%</td>
</tr>
</tbody>
</table>

I am thinking of a number that is not zero.
I **multiply** my number by $-2$
Tick the statement that is true.

- The answer must be positive
- The answer must be negative
- The answer could be positive or negative

Rebecca is $\frac{1}{3}$ of Barry's age.
Barry is $\frac{1}{6}$ of Neville's age.
If Rebecca is 4 years old, how old is Neville?

Is the shape a **regular** pentagon?

- Yes  
- No

Find the size of angle $x$

![Diagram with angles 140° and 140°]
19th March

\[
\frac{8}{9} \div 4
\]

\[
802 \times 223
\]

Find three different prime numbers that have a product of 165

Joey thinks the answer to \(16 + 4 \times 2\) is 40.
Tim thinks the answer to \(16 + 4 \times 2\) is 24.

Who is correct?
Explain your answer.

Here are three equations

\[
x + y + z = 28
\]
\[
x + y = 19
\]
\[
y + z = 13
\]

What are the values of \(x\), \(y\) and \(z\)?
Two glasses contain orange juice.
A 400ml glass is 40% full.
A 300ml glass is half full.
Which glass contains less orange juice?

Measure this reflex angle

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

Find the missing numbers
<table>
<thead>
<tr>
<th>21st March</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.875 ÷ 7</td>
</tr>
<tr>
<td><img src="image1" alt="Graph" /></td>
</tr>
<tr>
<td>Find the lowest common multiple (LCM) of 16 and 20</td>
</tr>
<tr>
<td>Sofa World and Sofa Land charge to deliver pizzas.</td>
</tr>
<tr>
<td>Describe the delivery cost of Sofa Land.</td>
</tr>
<tr>
<td><strong>Sofa World</strong></td>
</tr>
<tr>
<td><em>The greater the delivery distance, the greater the delivery cost.</em></td>
</tr>
<tr>
<td><strong>Sofa Land</strong></td>
</tr>
</tbody>
</table>
Adam is organising a charity concert at school. The concert is sold out. The hall holds 35 rows of 42 seats. Each person pays £18

How much money will Adam raise for charity?

Here is a shape made from 4 identical rectangles. The total area is 336 cm$^2$

Work out the value of y
### 23rd March

| 0.95 = \[\frac{\square}{\square}\] | 0.072 × 100,000 |

---

Write the number 2019 in Roman numerals

---

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

| 22cm |

The diameter of a small circle is 22cm.

Work out the **radius** of a large circle.
### 24th March

<table>
<thead>
<tr>
<th>12.5% = □□□□□</th>
<th>450 × 8 = 25 × □□□□□</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A chocolate bar contains 0.47153g of salt.
Round this to three decimal places.

Work out the volume of this cuboid

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 March

| 4.86 ÷ 6 | \[
\frac{7}{9} \times \frac{2}{3}
\] |

This graph helps change UK pounds into Polish złoty

| Change £20 into Polish złoty |

| Change 450 złoty into UK pounds. |

Kelsey says that she has drawn a triangle where "two of the three angles are obtuse."

Explain why Kelsey must be incorrect.
<table>
<thead>
<tr>
<th>26th March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplify $\frac{1650}{1850}$</td>
</tr>
<tr>
<td>Roger organises a trip to a museum.</td>
</tr>
<tr>
<td>The total price of the tickets is £103.50</td>
</tr>
<tr>
<td>The total price for the coach is £64.80.</td>
</tr>
<tr>
<td>9 people share the cost equally.</td>
</tr>
<tr>
<td>How much does each person pay?</td>
</tr>
<tr>
<td>Find the size of angle $x$.</td>
</tr>
<tr>
<td>The diagram shows three regular octagons</td>
</tr>
<tr>
<td>There is a blue dot at the centre of each octagon.</td>
</tr>
<tr>
<td>What fraction of the diagram is shaded?</td>
</tr>
</tbody>
</table>
27th March

<table>
<thead>
<tr>
<th>0.35 (\times) 9</th>
<th>4,000 (\div) 1,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean of four numbers is 10.
Three of the numbers are 9, 11 and 7.
Work out the fourth number.

\(a\) and \(b\) stand for two numbers.
Triple \(a\) equals a third of \(b\)
Write numbers to complete the sentence

\[\text{When } a \text{ is } \underline{\hspace{2cm}} \text{ then } b \text{ is } \underline{\hspace{2cm}}\]

Every second, 200\(\text{cm}^3\) of water comes out of a tap into the tank.
How long does it take to fill the tank from empty?

| 25cm | 12cm |
| 20cm |     |
Ricky goes on holiday for 4 days.
This table shows how far he walked in the first three days.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 miles</td>
<td>5 miles</td>
<td>11 miles</td>
</tr>
</tbody>
</table>

Ricky says that "my mean distance walked for the first three days is greater than 8 miles"

Show Ricky is correct.

Thursday is his last day on holiday.
Ricky wants to increase his mean to 10 miles.
How far must Ricky walk on Thursday?

The ratio of adults to children at a cricket match is 7:3.
There are 120 people at the match.
How many children attended the cricket match?
The pie chart shows how a group of 72 students travel to school.

How many students get the bus to school?

What fraction of the students travel by car?

The formula \( F = 1.8C + 32 \) can be used to convert between Celsius and Fahrenheit.

Work out \( C \) when \( F = 14 \)
30th March

\[ \frac{9}{13} \text{ of } 741 \]

\[ 800 \times 30\% \]

Describe the translation that takes shape A to shape B.

Reflect triangle B in the x-axis.

Solve the equation

\[ 3y - 1 = y + 7 \]
31st March

| 325 ÷ 13 | 700 − 100 × 5 + 90 |

Work out the size of angle x

Helen has used 80% of the coffee in a jar.

120 grams of coffee is left in the jar.

How much coffee does a full jar hold?

M is the midpoint of the line PQ.

Find the coordinates of Q

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