July 4th

Work out 638 + 873

\[
\begin{array}{c}
638 \\
+ 873 \\
\hline
1511
\end{array}
\]

5-a-day

1200 - 484

\[
\begin{array}{c}
1200 \\
- 484 \\
\hline
716
\end{array}
\]

Numeracy

Work out

\[
\begin{array}{c}
48 \div 8 = 6 \\
6 \times 3 = 18
\end{array}
\]

108 ÷ 4

\[
\begin{array}{c}
108 \\
\div 4 \\
\hline
27
\end{array}
\]

\[
\frac{3}{8} \text{ of } 48
\]

\[
\frac{3}{8} \times 48 = 18
\]

<table>
<thead>
<tr>
<th>Fraction</th>
<th>Decimal</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\frac{9}{100}$</td>
<td>0.09</td>
<td>9%</td>
</tr>
<tr>
<td>$\frac{15}{100} = \frac{3}{20}$</td>
<td>0.15</td>
<td>15%</td>
</tr>
<tr>
<td>$\frac{4}{5}$</td>
<td>0.8</td>
<td>80%</td>
</tr>
</tbody>
</table>

Arrange in order, starting with the smallest.

0.335  0.75  0.8

Work out 638 + 873

0.1 × 0.2

0.02
July 4

5-a-clay

Foundation

Solve $7x + 13 = 9x + 1$

\[
\begin{align*}
13 &= 2x + 1 \\
12 &= 2x \\
x &= 6
\end{align*}
\]

The diameter of a circle is 5.5 cm.
Calculate the circumference of a circle to 1 decimal place.

\[
\pi \times 5.5 = 17.3 \text{ cm}
\]

Show how the trapezium can tessellate.

Calculate the surface area

\[
\frac{200}{160} \frac{120}{24} = \frac{24}{5.28} = \frac{528}{cm^2}
\]

Is this triangle right-angled?

\[
a^2 + b^2 = c^2 \\
9^2 + 12^2 = 15^2 \\
81 + 144 = 225 \\
225 = 225
\]

Not drawn accurately
### July 4
#### 5-a-day
1. **How many sides does it have?**
   - \[360 \div 2 = 180\]
   - sides

   Shown is one angle from a regular polygon.

2. **Find the height of this equilateral triangle.**
   - \[a^2 + b^2 = c^2\]
   - \[b = \sqrt{75}\]
   - \[c^2 + b^2 = 10\]
   - \[b = 8.66\]
   - \[2s + b^2 = 100\]

3. **Simplify fully**
   - \[\frac{W}{2} \div \frac{W}{6}\]
   - \[\frac{W \times 6}{2W} = \frac{6W}{2W} = 3\]

4. **Find the volume of this sphere.**
   - \[\frac{4}{3} \pi r^3\]
   - \[\frac{4}{3} \times 6^3\]
   - \[= 36 \pi\]
   - \[= 113.1 \text{ cm}^3\]

#### Higher
5. **Expand fully.**
   - \[x(x + 1)(x - 2)\]
   - \[x(x^2 - 2x + 1 - 2)\]
   - \[x(x^2 - x - 2)\]
   - \[x^3 - x^2 - 2x\]