<table>
<thead>
<tr>
<th>July 14th</th>
<th>5-a-day</th>
<th>Numeracy</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Rectangle on a centimetre grid" /></td>
<td>The rectangle is drawn on a centimetre grid. What is its perimeter?</td>
<td>$14 \text{ cm}$</td>
</tr>
<tr>
<td>Convert 4 metres into centimetres</td>
<td>$400 \text{ cm}$</td>
<td>Convert 8 kilometres into metres</td>
</tr>
<tr>
<td><img src="image" alt="Shapes with areas A, B, and C" /></td>
<td>Which of these shapes have the same area?</td>
<td>$A \neq B$</td>
</tr>
<tr>
<td><img src="image" alt="Kite" /></td>
<td>Draw any lines of symmetry onto the kite.</td>
<td></td>
</tr>
<tr>
<td>There are 130 students in Year 11. The number of pupils in Year 11 is one-sixth of the total number of pupils in the school.</td>
<td>Work out the total number of pupils in the school.</td>
<td>$130 \times 6 = 780$</td>
</tr>
</tbody>
</table>
Arrange in order, from smallest to largest.

\[
\frac{1}{3} \quad \frac{7}{12} \quad \frac{3}{4}
\]

\[
\frac{4}{12} \quad \frac{7}{12} \quad \frac{9}{12}
\]

\[
\frac{1}{3}, \frac{7}{12}, \frac{3}{4}
\]

Simplify

\[7h + 5k + h - 3k\]

\[8h + 2k\]

Complete the table for \(y = 2x^2 + 1\)

<table>
<thead>
<tr>
<th>(x)</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>(y)</td>
<td>19</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td>19</td>
</tr>
</tbody>
</table>

\[
\frac{49.1 \times 8.08}{3.98}
\]

Work out an estimate

\[
\frac{50 \times 8}{4} = \frac{400}{4} = 100
\]

Calculate the surface area.

\[
600 \text{ cm}^2
\]
### July 14

#### 5-a-day

Write 75 as a product of primes.

\[ 75 = 3 \times 5 \times 5 \]

\[ 220 = 2 \times 2 \times 5 \times 11 \]

Work out the LCM of 75 and 220.

3300

Work out the HCF of 75 and 220.

5

#### Higher

Find x.

\[ 2x + 20 + x + 10 = 360 \]

\[ 3x + 30 = 360 \]

\[ 3x = 330 \]

\[ x = 110 \]

A logo is formed from 3 smaller triangles.

What is the perimeter of the logo?

\[ 2 + 2 + 2 + 4 = 12 \text{ cm} \]

\[ z^2 + (\sqrt{9})^2 = x^2 \]

\[ 4 + 8 = x^2 \]

\[ x = \sqrt{12} \]

\[ x^2 + 4^2 = z^2 \]

\[ x + 4 = z^2 \]

\[ z = \sqrt{16} = 4 \]