<table>
<thead>
<tr>
<th>Date</th>
<th>5-a-day</th>
<th>Numeracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 8th</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name this type of triangle</td>
<td>isosceles</td>
<td></td>
</tr>
<tr>
<td>Write these numbers in order of size. Start with the largest</td>
<td>4301 4290 4310</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4310 4301 4290</td>
<td>Work out the sum of 4301, 4290 and 4310</td>
</tr>
<tr>
<td>Here is a sequence of numbers</td>
<td>9 13 17 21 ... ...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 29</td>
<td>What is the rule for continuing the sequence?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+4 at 4 each time</td>
</tr>
<tr>
<td>Shown is the view from the front of a shape.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draw the plan view (view from above)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draw the side elevation (view from the side)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Work out the cube root of 125

5

Find a

110°

A student is chosen at random.
What is the probability they study French?

\[ \frac{15}{21} = \frac{5}{7} \]

What is the size of each interior angle of a regular pentagon?

108°

What is the size of each exterior angle of a regular pentagon?

72°

What is the size of each interior angle of a regular hexagon?

120°

What is the size of each exterior angle of a regular hexagon?

60°
### July 8

#### 5-a-day

Find the area of this triangle.

\[
\begin{align*}
\text{Not drawn to scale} & \\
10\text{cm} & \\
14\text{cm} & \\
\end{align*}
\]

\[
\begin{align*}
a^2 + 10^2 &= 14^2 \\
a^2 + 100 &= 196 \\
a^2 &= 96 \\
\sqrt{a} &= \sqrt{96} \\
&= 9.8 \\
\text{Area} &= \frac{1}{2} \times 9.8 \times 10 \\
&= 49 \text{cm}^2
\end{align*}
\]

#### Higher

<table>
<thead>
<tr>
<th>Length, L (cm)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 &lt; L ≤ 10</td>
<td>21</td>
</tr>
<tr>
<td>10 &lt; L ≤ 20</td>
<td>11</td>
</tr>
<tr>
<td>20 &lt; L ≤ 30</td>
<td>31</td>
</tr>
<tr>
<td>30 &lt; L ≤ 40</td>
<td>12</td>
</tr>
<tr>
<td>40 &lt; L ≤ 50</td>
<td>25</td>
</tr>
</tbody>
</table>

What is the modal interval?

20 < L ≤ 30

Calculate an estimate of the mean.

\[
\frac{2590}{100} = 25.9
\]

### M is directly proportional to the square of A.

When \( M = 200 \), \( A = 2 \).

Find \( M \) when \( A = 4 \).

\[
\begin{align*}
M &\propto A^2 \\
M &= kA^2 \\
200 &= k \times 4 \\
k &= 50 \\
M &= 50A^2 \\
M &= 50 \times 4^2 \\
&= 800
\end{align*}
\]

Simplify

\[
\frac{a^{\frac{1}{5}} \times a^{\frac{2}{3}}}{a^{\frac{3}{5}}}
\]

\[
\frac{\frac{1}{3} \times \frac{2}{3}}{\frac{3}{5}} \\
\frac{\frac{4}{15}}{\frac{3}{5}}
\]

\[
\frac{13}{15} \div \frac{4}{15}
\]

\[
\frac{13}{15} \div \frac{4}{15} \\
\frac{13}{15} \times \frac{15}{4} \\
\frac{13}{4}
\]

\[
\frac{3}{5} + \frac{2}{3} \\
\frac{3}{15} + \frac{10}{15} = \frac{13}{15}
\]

\[
\frac{13}{15} - \frac{2}{5} = \frac{13}{15} - \frac{6}{15} = \frac{7}{15}
\]