February 21st

5-a-day

Numeracy

Sketch the net for a Cube

What solid is this the net for?

Pyramid (square based)

Work out $\frac{1}{3}$ of 21

$\frac{1}{3} \times 21 = 7$

Work out $\frac{3}{5}$ of 35

$\frac{3}{5} \times 35 = 21$

Which shape has no lines of symmetry?

B

Which shape has no rotational symmetry?

A

<table>
<thead>
<tr>
<th>Nottingham</th>
<th>Manchester</th>
<th>Liverpool</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>158</td>
<td>346</td>
</tr>
<tr>
<td></td>
<td>56</td>
<td>348</td>
</tr>
<tr>
<td></td>
<td>446</td>
<td>384</td>
</tr>
</tbody>
</table>

Which two towns are the furthest distance apart?

Nottingham and Glasgow

What is the distance between Nottingham and Liverpool?

158

Solve the equation

$x + 10 = 21$

$x + 10 - 10 = 21 - 10$

$x = 11$

Solve the equation

$2w - 3 = 5$

$2w - 3 + 3 = 5 + 3$

$2w = 8$

$w = 4$
What is the sum of the interior angles of a pentagon?  \[ 540^\circ \]

What is the sum of the interior angles of a hexagon?  \[ 720^\circ \]

Shown is a green quadrilateral inside a square. Work out the area of the green quadrilateral.

\[ 10 \times 10 = 100\text{cm}^2 \]
\[ 20 + 25 = 45\text{cm}^2 \]
\[ 100 - 45 = 55\text{cm}^2 \]

Complete the table for \( y = 6 - x \)

<table>
<thead>
<tr>
<th>x</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>y</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Draw the graph of \( y = 6 - x \) on the grid.

What is the reciprocal of \( 0.4 \)?

\[ 0.4 = \frac{2}{5} \]

\( \frac{5}{2} \) or \( 2\frac{1}{2} \) or \( 2.5 \)
<table>
<thead>
<tr>
<th>February 21</th>
<th>5-a-day</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How far would you travel if you drove at 60mph for 5 hours 15 minutes?</strong></td>
<td>5.25 \times 60 = 315 \text{ miles}</td>
<td></td>
</tr>
</tbody>
</table>
| ![Semicircle Diagram](Image) | Calculate the area of this semi-circle. | \[
\frac{1}{2} \pi (5^2) = 39.27 \text{ cm}^2
\]
| **Make w the subject of** a = 4w - 3 | w = \frac{a + 3}{4} | |
| ![Distance Between Points](Image) | Helicopter A traveled 15km on a bearing of 060°. Helicopter B traveled 20km on a bearing of 135°. Calculate the distance between A and B. | \[
\begin{align*}
\alpha^2 &= b^2 + c^2 - 2bc \cos \alpha \\
\alpha^2 &= 15^2 + 20^2 - 2 \times 15 \times 20 \times \cos 75^\circ \\
\alpha^2 &= 469.7085729 \\
\alpha &= 21.67 \text{ km}
\end{align*}
\] |