July 12th

5-a-day

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 orange juices at £2 each</td>
<td>£8.00</td>
</tr>
<tr>
<td>3 sandwiches at £2.50 each</td>
<td>£7.50</td>
</tr>
<tr>
<td>4 chocolate bars at 45p each</td>
<td>£1.80</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£17.30</strong></td>
</tr>
</tbody>
</table>

What fraction of the pizza did Martin eat? Give your answer in its simplest form.

A pizza is cut into eight equal slices. Martin eats 2 of them.

\[ \frac{2}{8} = \frac{1}{4} \]

Write 61% as a decimal

0.61

Write 0.17 as a percentage

17%

3 9 27 81

What is the rule for carrying on the sequence?

\( \times 3 \)

Explain why 8028 is not a term in this sequence.

\[ 8028 \text{ is even} \]

\[ \text{odd} \times 3 = \text{odd} \ldots \]

Multiply these one digit numbers together.

\( 7 \times 5 \times 3 \times 8 \)

\( 7 \times 5 = 35 \)

\( 35 \times 3 = 105 \)

\( 105 \times 8 = 840 \)
<table>
<thead>
<tr>
<th>July 12</th>
<th>5-a-day</th>
<th>Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>6cm</td>
<td>4cm</td>
<td>The rectangle is enlarged by scale factor 3. What would the new length and width be?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18cm 12cm</td>
</tr>
</tbody>
</table>

The angles in a quadrilateral are in the ratio 3:1:4:2
What is the size of each angle?

\[ \frac{3+1+4+2}{10} = 180 \]

\[ 3 \times 36 = 108 \]
\[ 1 \times 36 = 36 \]
\[ 4 \times 36 = 144 \]
\[ 2 \times 36 = 72 \]

\[ R = 8 - \sqrt{S} \]
Calculate R if S = 9

\[ R = 8 - \sqrt{9} = 8 - 3 = 5 \]

Expand and simplify
\[ 4(x^2 + 5) - 3(x^2 - 1) \]
\[ 4x^2 + 20 - 3x^2 + 3 \]

\[ x^2 + 23 \]

£500 is invested at 10% interest for two years. How much money will there be after 2 years?

\[ £500 \quad 10\% = £55 \quad £550 - \text{after 1 year} \]
\[ £605 - \text{after 2 years} \]
<table>
<thead>
<tr>
<th>July 12</th>
<th>5-a-day</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>110</strong></td>
<td>Find the size of each angle.</td>
<td>4x + 40 = 360</td>
</tr>
<tr>
<td>90</td>
<td>4x = 320</td>
<td></td>
</tr>
<tr>
<td>160</td>
<td>x = 80</td>
<td></td>
</tr>
<tr>
<td><strong>2x</strong></td>
<td><strong>90</strong></td>
<td></td>
</tr>
<tr>
<td><strong>160</strong></td>
<td><strong>90</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Factorise fully.**

\[ 36a^2 - 4y^2 \]

\[ 4(a^2 - y^2) \]

**Find the length of RS.**

\[ \frac{14}{\sin 53} = 17.53 \text{ cm} \]

**A cube has the same volume as the cone shown.**

\[ \frac{1}{3} \pi (5)^2 \times 9 = 75 \pi \text{ cm}^3 \]

\[ \frac{3}{2} \pi \text{ cm}^3 \]

\[ x = \sqrt[3]{235.619} \]

\[ x = 6.176 \text{ cm} \]

\[ x = \sqrt{235.619} \]

\[ x = 6.176 \text{ cm} \]

**Simplify**

\[ \sqrt{200} \]

\[ 10 \sqrt{2} \]

**Work out**

\[ \sqrt{200} + \sqrt{50} \]

\[ 15 \sqrt{2} \]