<table>
<thead>
<tr>
<th>May 15th</th>
<th>5-a-day</th>
<th>Numeracy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name this shape</strong></td>
<td>hexagon</td>
<td>Draw a kite</td>
</tr>
<tr>
<td><strong>Plot the coordinate</strong></td>
<td>(-2, -1)</td>
<td></td>
</tr>
<tr>
<td><strong>Find x</strong></td>
<td>$150 \div 2 = 75^\circ$</td>
<td></td>
</tr>
<tr>
<td><strong>Write as a mixed number</strong></td>
<td>$\frac{5}{3} = 1 \frac{2}{3}$</td>
<td></td>
</tr>
<tr>
<td><strong>Two spinners are spun. The scores are multiplied together to give a total score.</strong></td>
<td>Complete the table.</td>
<td>What is the probability of an odd total score?</td>
</tr>
<tr>
<td><strong>What is the probability of an odd total score?</strong></td>
<td>$\frac{2}{6} = \frac{1}{3}$</td>
<td></td>
</tr>
</tbody>
</table>
### May 15th

#### 5-a-day

**Work out** $5 \div \frac{3}{4}$

$$\frac{5 \times 4}{3} = \frac{20}{3} = 6\frac{2}{3}$$

#### Foundation

1. **Draw** $x = 4$
2. **Draw** $y = 3$

Complete the table and draw the line $y = x + 3$

<table>
<thead>
<tr>
<th>$x$</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>$y$</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**What is the reciprocal of** $\frac{3}{4}$

$$\frac{4}{3} = 1\frac{1}{3}$$

**Find the length of the missing side**

$$7^2 + 11^2 = c^2$$

$$49 + 121 = c^2$$

$$c = \sqrt{170} \approx 13.04\text{cm}$$
<table>
<thead>
<tr>
<th>May 15</th>
<th>5-a-day</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>The population of birds on an island is decreasing by 6% a year.</td>
<td></td>
<td>$7000 \times 0.94^3$</td>
</tr>
<tr>
<td>In 2004 there were 7000 birds.</td>
<td></td>
<td>$= 5814$</td>
</tr>
<tr>
<td>How many birds were there in 2007?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expand and simplify $(y + 5)^2$</td>
<td></td>
<td>$y^2 + 10y + 25$</td>
</tr>
<tr>
<td>$(y+5)(y+5)$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Write as a single power of 4.</td>
<td></td>
<td>$\frac{45 \times 4^7}{4^3} = \frac{4^{11}}{4^3}$</td>
</tr>
<tr>
<td>Solve</td>
<td></td>
<td>$= 4^9$</td>
</tr>
<tr>
<td>$3x^2 - 16x + 16 = 0$</td>
<td></td>
<td>$(3x - 4)(x - 4) = 0$</td>
</tr>
<tr>
<td>$x = \frac{4}{3}$ or $x = 4$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Calculate the perimeter. Leave your answer in terms of pi. | | \[
\begin{align*}
\text{Arc} &= \frac{1}{6} \times \pi \times 36 = 6\pi \\
18^2 + 18 + 6\pi &= 36 + 6\pi \text{ cm}
\end{align*}
\] |