<table>
<thead>
<tr>
<th>October 1st</th>
<th>5-a-day</th>
<th>Numeracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>[65^\circ] [y]</td>
<td>[115^\circ]</td>
<td></td>
</tr>
<tr>
<td>Simplify 4a + 2a - a</td>
<td>Simplify 3w + 8y - 2w + 2y</td>
<td>[5x]</td>
</tr>
<tr>
<td>Write down all the factors of 30</td>
<td>Write down all the multiples of 4 between 15 and 25</td>
<td>[1, 2, 3, 5, 6, 10, 15, 30]</td>
</tr>
<tr>
<td>A football shirt normally costs £40. A shop offers a 20% discount. What is the new price of the football shirt?</td>
<td></td>
<td>£32</td>
</tr>
<tr>
<td>Helen is paid £10 per hour. She works 2½ hours each day. In one week she worked 5 days. How much did Helen earn in that week?</td>
<td></td>
<td>£25 [\times 5]</td>
</tr>
<tr>
<td>October 1</td>
<td>5-a-day</td>
<td>Foundation</td>
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<td>-----------</td>
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</tr>
<tr>
<td>x 2 -10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 14 -30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-8 -16 80</td>
<td></td>
<td></td>
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</tbody>
</table>

Write 16 as a product of primes. Give your answer in index form.

\[2 \times 3^2\]

Martin asked 6 friends their age.

21 28 28 29 30

If a seventh friend has an age of 34, will the mean decrease, increase or stay the same?

Increase

Expand and simplify

\[4(x^2 + 5) + 3(x^2 - 1)\]

\[4x^2 + 20 + 3x^2 - 3\]

\[7x^2 + 17\]

Translate A by vector

\[
\begin{pmatrix}
0 \\
-2
\end{pmatrix}
\]
<table>
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<th>October 1</th>
<th>5-a-day</th>
<th>Higher</th>
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</thead>
<tbody>
<tr>
<td>((2.1 \times 10^{-5}) + (7 \times 10^{-4}))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0 \cdot 3 \times 10^{-1})</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3 \times 10^{-2})</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Solve the simultaneous equations
\[
\begin{align*}
y &= 13 - 4x \\
4x + y &= 13 \\
3x + 2y &= 16
\end{align*}
\]
\[
\begin{align*}
8x + 2y &= 26 \\
3x + 2y &= 16
\end{align*}
\]
\[
\frac{8x}{3} = 10 \\
x = 2
\]
\[
y = 5
\]

Simplify fully
\[
\frac{c - 2}{14} \times \frac{12^3}{2c - 4}
\]
\[
\frac{3c - 6}{2c - 4} \cdot \frac{3(c - 2)}{2(c - 2)}
\]
\[
\frac{3}{2}
\]

\[
25^2 = 125
\]
\[
25^{\frac{3}{2}} = 125
\]

£200 is invested at 2.8% compound interest per annum.
How many years will it take for the investment to exceed £7000.
\[
5200 \times 1.028^n
\]
11 years