Hundred and thousands

\[ 0.056 \times 0.0072 = \quad \]  
\[ 5600 \times 0.072 = \quad \]  
\[ 56 \times 0.072 = \quad \]  
\[ 56000 \times 0.072 = \quad \]  
\[ 56 \times 72 = 4032 \]  
\[ 5.6 \times 72 = \quad \]  
\[ 5.6 \times 7.2 = \quad \]  
\[ 0.56 \times 0.72 = \quad \]  
\[ 560 \times 7.2 = \quad \]  
\[ 56000 \times 720 = \quad \]
**Sports results**

<table>
<thead>
<tr>
<th>Javelin</th>
<th>Long jump</th>
<th>Pole vaulting</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 62.29 m</td>
<td>A 7.185 m</td>
<td>A 5.90 m</td>
</tr>
<tr>
<td>B 62.305 m</td>
<td>B 701.8 cm</td>
<td>B 5.095 m</td>
</tr>
<tr>
<td>C 62.3 m</td>
<td>C 7049 mm</td>
<td>C 500.9 cm</td>
</tr>
<tr>
<td>D 62.35 m</td>
<td>D 700.5 cm</td>
<td>D 5090.5 mm</td>
</tr>
<tr>
<td>E 62.285 m</td>
<td>E 7.108 m</td>
<td>E 0.005 945 km</td>
</tr>
</tbody>
</table>

1st        _______  | 1st        _______  | 1st        _______
2nd        _______  | 2nd        _______  | 2nd        _______
3rd        _______  | 3rd        _______  | 3rd        _______
4th        _______  | 4th        _______  | 4th        _______
5th        _______  | 5th        _______  | 5th        _______
Stepping stones to percentages

110% = _______
10% = _______
95% = _______
5% = _______
20% = _______
25% = _______
10% = _______
50% = _______
20% = _______
1% = _______
95% = _______
5% = _______
25% = _______
50% = _______

Stepping stones to fractions

\[
\frac{3}{10} = \quad \frac{1}{20} = \\
\frac{1}{5} = \quad \frac{1}{10} = \\
\frac{1}{4} = \quad \frac{1}{3} = \\
\frac{3}{4} = \quad \frac{1}{2} = \\
1\frac{1}{2} =
\]
Year 9 maths

At Kings School, all Year 9 forms have 24 pupils. In Form 9B maths lessons, pupils are grouped at tables like this.
Year 9 maths

At Kings School, all Year 9 forms have 24 pupils.
In Form 9B, there are 2 boys to every 4 girls.

\[
\text{number of boys : number of girls} = 2 : 4
\]

In maths lessons, they are grouped at tables like this.

Complete this table for all Year 9 maths groups.

<table>
<thead>
<tr>
<th>Form</th>
<th>Each table</th>
<th>No. of tables</th>
<th>Ratio G : B</th>
<th>Simplest ratio</th>
<th>Ratio B : G</th>
<th>Simplest ratio</th>
<th>No. of girls</th>
<th>No. of boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>9A</td>
<td>1G 1B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9B</td>
<td>4G 2B</td>
<td>4 : 2</td>
<td>2 : 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9C</td>
<td>3G 1B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9D</td>
<td>5G 3B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9E</td>
<td>4G 8B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Arrows

Arrows 1

1 arrow needs ______ matches.

2 arrows need ______ matches.

3 arrows need ______ matches.

Rule: \( m = 4a + 2 \)
where \( a \) is the number of arrows
and \( m \) is the number of matches

Arrows 2

1 arrow needs ______ matches.

2 arrows need ______ matches.

3 arrows need ______ matches.

Rule: \( m = \) ______
where \( a \) is the number of arrows
and \( m \) is the number of matches
Twelve days of Christmas (1)

Match the expressions.

On the 1st day of Christmas, my true love gave to me \( n \) presents.

\[ 2n + 6 \]

On the 2nd day, half as many as the 1st day.

\[ 2 + n \]

On the 3rd day, double the number on the 1st day.

\[ 2n \]

On the 7th day, six more than double the number on the 1st day.

\[ 2(n + 6) \]

\[ \frac{n}{2} \]

\[ n \]
## Twelve days of Christmas (1)

<table>
<thead>
<tr>
<th>Day</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st day</td>
<td>(n) presents</td>
</tr>
<tr>
<td>2nd day</td>
<td>(5 - n)</td>
</tr>
<tr>
<td>3rd day</td>
<td>(2n + 12)</td>
</tr>
<tr>
<td>4th day</td>
<td>(n)</td>
</tr>
<tr>
<td>5th day</td>
<td>(2(n + 6))</td>
</tr>
<tr>
<td>6th day</td>
<td>(6n + 4)</td>
</tr>
<tr>
<td>7th day</td>
<td>(5 + \frac{n}{2})</td>
</tr>
<tr>
<td>8th day</td>
<td>(n + 2)</td>
</tr>
<tr>
<td>9th day</td>
<td>(2 - n)</td>
</tr>
<tr>
<td>10th day</td>
<td>(\frac{n}{2})</td>
</tr>
<tr>
<td>11th day</td>
<td>(n - 2)</td>
</tr>
<tr>
<td>12th day</td>
<td>(2n)</td>
</tr>
<tr>
<td></td>
<td>(2n + 6)</td>
</tr>
</tbody>
</table>
Twelve days of Christmas (2)

Match the expressions.

On the 1st day of Christmas, my true love gave to me \( x \) presents.

On the 2nd day, a fifth of the number on the 1st day.

On the 3rd day, five times the number on the 1st day.

On the 7th day, five less than the number on the 1st day.

On the 12th day, three plus a fifth of the number on the 1st day.
<table>
<thead>
<tr>
<th>Day</th>
<th>Description</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>My true love gave to me ...</td>
<td>$x + 5$</td>
</tr>
<tr>
<td>2nd</td>
<td>a fifth of the number on the 1st day</td>
<td>$20x - 6$</td>
</tr>
<tr>
<td>3rd</td>
<td>five times the number on the 1st day</td>
<td>$2x^2$</td>
</tr>
<tr>
<td>4th</td>
<td>five more than the number on the 1st day</td>
<td>$4x + 10$</td>
</tr>
<tr>
<td>5th</td>
<td>five less than the number on the 1st day</td>
<td>$x/5$</td>
</tr>
<tr>
<td>6th</td>
<td>fifteen subtract the number on the 1st day</td>
<td>$15 - x$</td>
</tr>
<tr>
<td>7th</td>
<td>ten more than four times the number on the 1st day, times four (2 expressions)</td>
<td>$5x$</td>
</tr>
<tr>
<td>8th</td>
<td>twice the square of the number on the 1st day</td>
<td>$3 + \frac{x}{5}$</td>
</tr>
<tr>
<td>9th</td>
<td>four times the number on the 3rd day minus six</td>
<td>$4(x + 10)$</td>
</tr>
<tr>
<td>10th</td>
<td>sixteen minus the number on the 4th day</td>
<td>$11 - x$</td>
</tr>
<tr>
<td>11th</td>
<td>three plus a fifth of the number on the 1st day</td>
<td>$x - 5$</td>
</tr>
<tr>
<td>12th</td>
<td>three plus a fifth of the number on the 1st day</td>
<td>$4x + 40$</td>
</tr>
</tbody>
</table>
Substitution spider (1)

\[
\begin{align*}
90 - 5n &= 0 \\
2n + 1 &= 0 \\
(3n)^2 &= 0 \\
5n &= 0 \\
n^2 &= 0 \\
2n &= 0 \\
2(n + 1) &= 0 \\
n + 1 &= 0 \\
3 - n &= 0 \\
4(3 - n) &= 0 \\
\frac{n}{2} - 3 &= 0 \\
\frac{n - 3}{2} &= 0
\end{align*}
\]
Substitution spider (2)

\[ 5n = \quad 2n = \quad n + 1 = \quad 3 - n = \]

\[ n = \]

\[ 3n = \quad n^2 = \quad \frac{n}{2} = \quad n - 3 = \]
Halving rectangles

Area? Perimeter?

Cut in half

Area? Perimeter?

Cut in half

Area? Perimeter?

Cut in half

Areas? Perimeters?
Nets of cuboids

Complete its net below.

6 cm

3 cm

4 cm
Angles and transformations
Transformations

The image shows a graph with axes labeled as the x-axis and y-axis. Points labeled P, Q, R, and S are plotted on the grid. The point A is reflected across the y-axis to form point M, demonstrating a transformation of reflection. The diagram illustrates the concept of transformations in geometry.
Potato bar chart

Type of potato preferred by teachers at school A

Number of teachers

Potato

- Chips
- Baked
- Mashed
- None
Potato pie chart

Type of potato preferred by teachers at school B

- Chips
- Mashed
- Baked
- None
Fairground games

Only £1 a go

Oct-a-Spin

Hex-a-Spin
£1 a go
## Mean maths 1

<table>
<thead>
<tr>
<th>Name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amdeep</td>
<td>5</td>
</tr>
<tr>
<td>Bill</td>
<td>9</td>
</tr>
<tr>
<td>Colin</td>
<td>6</td>
</tr>
<tr>
<td>Debbie</td>
<td>1</td>
</tr>
<tr>
<td>Ellis</td>
<td>9</td>
</tr>
<tr>
<td>Amdeep</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---</td>
</tr>
<tr>
<td>Bill</td>
<td></td>
</tr>
<tr>
<td>Colin</td>
<td></td>
</tr>
<tr>
<td>Debbie</td>
<td></td>
</tr>
<tr>
<td>Ellis</td>
<td></td>
</tr>
</tbody>
</table>