
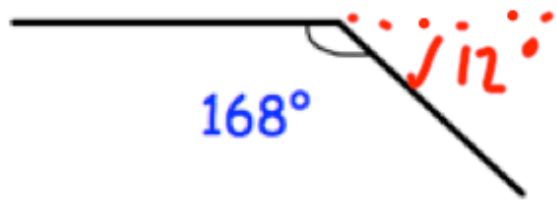
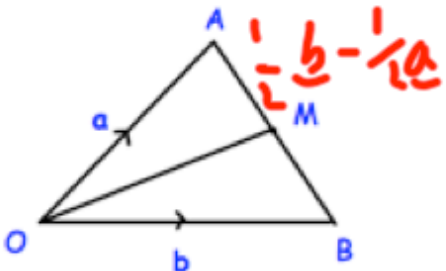


July 31st	5-a-day	Numeracy
Write down the square root of 100 10	Write down the cube of 5 125	
Add together 49 and 94 143	Multiply 39 and 10 390	
Work out 10% of 50 5	Work out 50% of 70 35	
Solve: $3x = 24$ $x = 8$	Solve $x - 3 = 24$ $x = 27$	
Simplify: $10a + 4c - 2a - 3c$ $8a + c$	Simplify: $a \times a \times a$ a^3	

July 31	5-a-day	Foundation																																				
<table style="border-collapse: collapse; margin-left: 20px;"> <tr> <td style="border-right: 1px solid black; padding: 5px 10px;">0</td> <td style="padding: 5px 10px;">1</td> <td style="padding: 5px 10px;">1</td> <td style="padding: 5px 10px;">1</td> <td style="padding: 5px 10px;">2</td> <td style="padding: 5px 10px;">2</td> <td style="padding: 5px 10px;">3</td> <td style="padding: 5px 10px;">4</td> <td style="padding: 5px 10px;">4</td> <td style="padding: 5px 10px;">5</td> <td style="padding: 5px 10px;">6</td> <td style="padding: 5px 10px;">9</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px 10px;">1</td> <td style="padding: 5px 10px;">0</td> <td style="padding: 5px 10px;">0</td> <td style="padding: 5px 10px;">2</td> <td style="padding: 5px 10px;">3</td> <td style="padding: 5px 10px;">7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px 10px;">2</td> <td style="padding: 5px 10px;">2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>KEY 1 7 means 17</p>			0	1	1	1	2	2	3	4	4	5	6	9	1	0	0	2	3	7							2	2										
0	1	1	1	2	2	3	4	4	5	6	9																											
1	0	0	2	3	7																																	
2	2																																					
<p>Work out the range</p> $22 - 1 = 21$	<p>Write down the mode</p> <p style="text-align: center;">1</p>																																					
<p>Age Frequency</p> <table style="margin-left: 20px;"> <tr> <td>$0 \leq a < 10$</td> <td>4</td> </tr> <tr> <td>$10 \leq a < 20$</td> <td>4</td> </tr> <tr> <td>$20 \leq a < 40$</td> <td>2</td> </tr> </table> <div style="margin-left: 100px;"> $\begin{array}{r} fx \\ 20 \\ 60 \\ 60 \\ \hline 140 \end{array}$ </div>	$0 \leq a < 10$	4	$10 \leq a < 20$	4	$20 \leq a < 40$	2	<p>Calculate the estimated mean</p> $140 \div 10 = 14$																															
$0 \leq a < 10$	4																																					
$10 \leq a < 20$	4																																					
$20 \leq a < 40$	2																																					
<p>Expand</p> $(x + 4)(x - 3)$	$x^2 - 3x + 4x - 12$ $x^2 + x - 12$																																					
<p>Calculate the perimeter</p> $x^2 + 10^2 = 14^2$ $x^2 = 14^2 - 10^2$ $x^2 = 96 \quad x = 9.798$	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Not drawn to scale</p>  </div> <div> $\begin{array}{r} 10 \\ 14 \\ + 9.798 \\ \hline 33.798 \text{ cm} \end{array}$ </div> </div>																																					

July 31	5-a-day	Higher
 <p>Shown is one angle from a regular polygon.</p>	<p>How many sides does it have?</p> $360 \div 12 = 30 \text{ sides}$	
<p>A is inversely proportional to N^2</p> <p>When $A = 9$, $N = 2$. $A \propto \frac{1}{N^2}$</p> <p>Find A when $N = 4$. $A = \frac{k}{N^2}$</p>	$9 = \frac{k}{4} \quad k = 36$ $A = \frac{36}{N^2} \quad A = \frac{36}{16} = 2.25$	
<p>The length of a 200m running track is correct to the nearest metre.</p> <p>The time taken for Jenna to run the distance is 25.8 seconds measured to the nearest one-tenth of a second.</p>	<p>What is the fastest possible average speed?</p> $s = \frac{d}{t} \quad \begin{matrix} \text{high} \\ \text{low} \end{matrix} \quad \frac{200.5}{25.75}$ 7.7864 m/s	
 <p>M is the midpoint of AB</p>	<p>Find the vector \overrightarrow{AB}</p> $-a + b$ <p>or</p> $b - a$	
<p>Find the vector \overrightarrow{AM}</p> $\frac{1}{2}(-a + b)$ <p>or $\frac{1}{2}(b - a)$</p> <p>or $\frac{1}{2}b - \frac{1}{2}a$</p>	<p>Find the vector \overrightarrow{OM}</p> $a + \frac{1}{2}b - \frac{1}{2}a$ $= \frac{1}{2}a + \frac{1}{2}b$	