


June 15th	5-a-day	Numeracy
<p>Round 9384 to the nearest 10</p> <p>9380</p>	<p>Round 9384 to the nearest 100</p> <p>9400</p>	
<p>Martin says the next number after a square number is always prime. He is wrong.</p> <p>Write down two square numbers where the next number is not prime.</p>	<p>25                      49</p>	
<p>Decrease 600 by 40%</p> <p>10% = 60 40% = 240</p>	<p>600 - 240 ----- 360</p> <p>360</p>	
	<p>Find x</p> <p>180 - 60 ----- 120</p>	
<p>Work out <math>\frac{4}{5}</math> of 85.</p> <p>85 ÷ 5 = 17 17 × 4 = 68</p>	<p>Write <math>\frac{4}{5}</math> as a decimal.</p> <p>0.8</p>	

June 15	5-a-day	Foundation												
<p>3kg of tomatoes is £4.80</p> <p>How much does 2kg cost?</p>		$4.80 \div 3 = 1.60$ $1.60 \times 2 = 3.20$												
<p>Solve <math>5y - 4 = 21</math></p>														
	<p>Draw <math>x = 3</math></p> <p>Draw <math>y = -2</math></p>													
		<p>Complete the table and draw the line <math>y = 2x - 1</math></p> <table border="1" data-bbox="805 1406 1273 1608"> <tr> <td>x</td> <td>-2</td> <td>-1</td> <td>0</td> <td>1</td> <td>2</td> </tr> <tr> <td>y</td> <td>-5</td> <td>-3</td> <td>-1</td> <td>1</td> <td>3</td> </tr> </table>	x	-2	-1	0	1	2	y	-5	-3	-1	1	3
x	-2	-1	0	1	2									
y	-5	-3	-1	1	3									
<p>Not drawn accurately</p>		<p>Calculate the length of AB</p> $7^2 + 24^2 = c^2$ $625 = c^2$ $c = 25$												

June 15	5-a-day	Higher						
<p>Solve <math>3x + 7 = 5x - 11</math></p> $7 = 2x - 11$ $18 = 2x$ $x = 9$								
<p>Where does the line <math>y = 4x - 8</math> cross the y-axis?</p> $\curvearrowright x = 0$ $y = -8 \quad (0, -8)$	<p>Where does the line <math>y = 4x - 8</math> cross the x-axis?</p> $\curvearrowright y = 0$ $0 = 4x - 8$ $x = 2 \quad (2, 0)$							
<p>Show that the line <math>y = 3x + 1</math> is perpendicular to the line <math>x + 3y + 9 = 0</math></p> $y = mx + c$ $3y = -x - 9 \quad y = -\frac{1}{3}x - 3$	$m_1 \times m_2 = -1$ $3 \times -\frac{1}{3} = -1$	<p><math>\therefore</math> perpendicular (negative reciprocal)</p>						
<p>Solve</p> $x + y = 11 \quad x = 11 - y$ $xy = 30$ $(11 - y)y = 30$ $11y - y^2 = 30 \rightarrow y^2 - 11y + 30 = 0$	$(y - 5)(y - 6) = 0$ $y = 5 \text{ or } y = 6$	$x + y = 11$ $y = 5, x = 6$ $y = 6, x = 5$						
<table border="0"> <tr> <td>Year 7</td> <td>120</td> </tr> <tr> <td>Year 8</td> <td>150</td> </tr> <tr> <td>Year 9</td> <td>130</td> </tr> </table> <p>Mr Jones is taking a stratified sample of 80 students.</p>	Year 7	120	Year 8	150	Year 9	130		<p>How many year 9 students will he select?</p> $\frac{130}{400} \times 80 = 26$
Year 7	120							
Year 8	150							
Year 9	130							