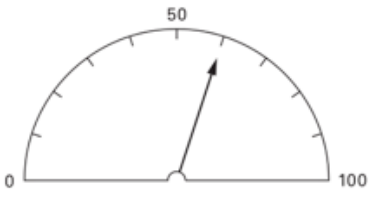
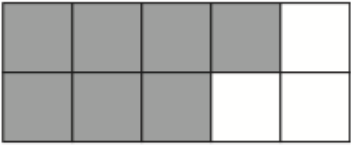
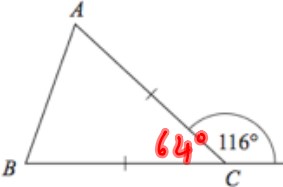
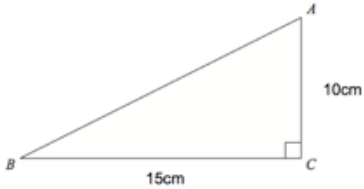



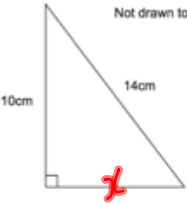
Name: _____

September 14th	5-a-day	Numeracy
<p>Shown is a car speedometer. The speed limit is 25mph.</p> <p>The car is how many mph over the speed limit?</p> <p>$60 - 25 = 35 \text{ mph}$</p>		
	<p>What fraction of the rectangle is shaded?</p> <p>$\frac{7}{10}$</p>	
	<p>Find the size of angle B.</p> <p>$180 - 64 = 116^\circ$</p> <p>58°</p>	
<p>8 11 14 <u>17</u> <u>20</u></p> <p>Find the next two terms in this sequence.</p>	<p>What is the 10th term in the sequence?</p> <p>23 26 29 32 35</p> <p>35</p>	
<p>Show that when you multiply three consecutive numbers that the answer is always in the six times tables.</p> <p>Try three different examples.</p>	<p>$1 \times 2 \times 3 = 6$</p> <p>$2 \times 3 \times 4 = 24$</p> <p>$3 \times 4 \times 5 = 60$</p>	

Name: _____

September 14	5-a-day	Foundation																																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">0</td> <td style="width: 10%; border-right: 1px solid black;">1</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">5</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">2</td> </tr> <tr> <td>1</td> <td style="border-right: 1px solid black;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td style="border-right: 1px solid black;">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 1.7</p>			0	1	1	1	2	2	2	2	2	5	2	2	1	0	0	2	2	2							2	2										
0	1	1	1	2	2	2	2	2	5	2	2																											
1	0	0	2	2	2																																	
2	2																																					
<p>Work out the median</p> <p style="text-align: center; font-size: 2em; color: red;">0.5</p>	<p>Write down the mode</p> <p style="text-align: center; font-size: 2em; color: red;">0.1</p>																																					
	<p>Find the length of AB</p> <p style="text-align: center; font-size: 1.5em; color: red;">$10^2 + 15^2 = 325$</p> <p style="text-align: center; font-size: 1.5em; color: red;">$\sqrt{325} =$</p> <p style="text-align: center; font-size: 1.5em; color: red;">18.028cm</p>																																					
<p>There are 400 counters in a bag.</p> <p>James takes out 10 counters.</p> <p>Red Red White Red White</p> <p>Green Red Red Red White</p>	<p>What is the relative frequency of a white?</p> <p style="text-align: center; font-size: 1.5em; color: red;">$\frac{3}{10}$</p> <p>Work out the expected number of whites in the bag.</p> <p style="text-align: center; font-size: 1.5em; color: red;">$0.3 \times 400 = 120$</p>																																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Time taken</th> <th style="width: 10%;">Frequency</th> <th style="width: 60%;">Frequency</th> </tr> </thead> <tbody> <tr> <td>$10 < t \leq 20$</td> <td style="color: red;">15</td> <td>17</td> </tr> <tr> <td>$20 < t \leq 30$</td> <td style="color: red;">25</td> <td>19</td> </tr> <tr> <td>$30 < t \leq 40$</td> <td style="color: red;">35</td> <td>23</td> </tr> <tr> <td></td> <td style="text-align: center; color: red; border-top: 1px solid red;">59</td> <td></td> </tr> </tbody> </table>	Time taken	Frequency	Frequency	$10 < t \leq 20$	15	17	$20 < t \leq 30$	25	19	$30 < t \leq 40$	35	23		59		<p>Calculate the mean</p> <p style="font-size: 1.5em; color: red;">255 475 805 <hr style="width: 100%; border: 0.5px solid red;"/>1535</p> <p style="font-size: 1.5em; color: red;">$1535 \div 59 = 26.017$</p>																						
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Name: _____

September 14	5-a-day	Higher
<p>Expand</p> $2y(3y + 5)$	$6y^2 + 10y$	
	<p>Shown is a regular pentagon. What is the size of each interior angle?</p> 108°	
<p>Calculate the gradient of the straight line passing through (0, 1) and (4, 21).</p> $\frac{21-1}{4-0} = \frac{20}{4} = 5$	<p>Write down the equation of the line.</p> $y = 5x + 1$	
<p>Hollie has £600 that she wants to exchange into Euro. The exchange rate is £1 = €1.39 The lowest note that the post office has is €20.</p>	<p>How many Euro can Hollie buy and how much will this cost her?</p> $600 \times 1.39 = 834 \text{ €}$ $€820, \text{ £}589.93$	
<p>Calculate the area</p> $x^2 = 14^2 - 10^2$ $x^2 = 96 \quad x = 9.7979\dots$ $A = \frac{1}{2}(9.7979\dots \times 10)$	<p>Not drawn to scale</p>  48.99 cm^2	