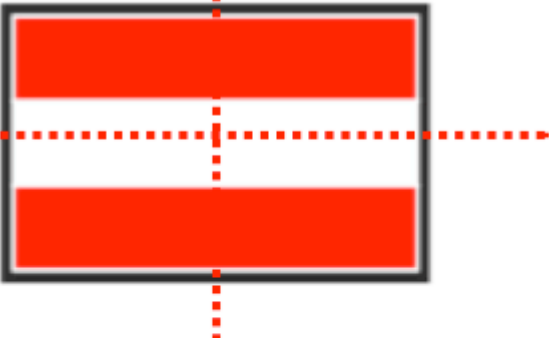
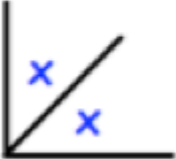

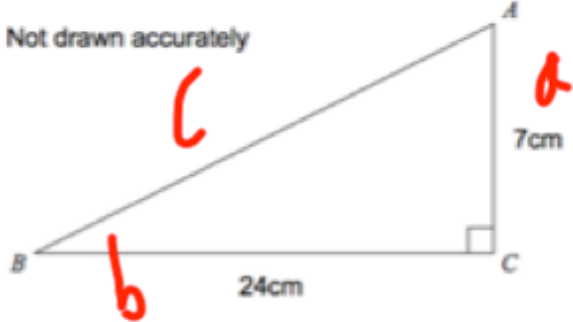


July 21st	5-a-day	Numeracy
<p>A new car costs £13,650</p> <p>Write this number in words</p> <p>thirteen thousand, six hundred and fifty</p>		
	<p>How many lines of symmetry does the Austrian flag have?</p> <p>2</p>	
<p>Hannah earns £400 a week</p> <p>She is given a 20% pay rise.</p> <p>What is her new wage?</p>	<p>10% = 40</p> <p>20% = 80</p> <p>£400 + £80 = £480</p>	
 <p>Both angles marked x are equal.</p> <p>Find the size of x.</p>	<p>$90 \div 2 = 45^\circ$</p>	
 <p>All three angles marked x are equal.</p> <p>Find the size of x</p>	<p>$180 \div 3 = 60^\circ$</p>	

July 21	5-a-day	Foundation																									
<p>100 people play a game that costs £1.</p> <p>The probability of winning is 0.1</p> <p>The prize is £4.</p>	<p>Calculate how much profit the game makes.</p>	<p>Handwritten solutions:</p> $100 \times 0.1 = 10$ $10 \times £4 = £40$ $£100 - £40 = £60$																									
<p>Two spinners have the equal size sections with the numbers 1, 2, 3 and 4.</p> <p>They are spun and the two numbers are added together.</p> <p>Complete the table to show all the possible totals.</p>	<table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> </tr> </table>		1	2	3	4	1	2	3	4	5	2	3	4	5	6	3	4	5	6	7	4	5	6	7	8	
	1	2	3	4																							
1	2	3	4	5																							
2	3	4	5	6																							
3	4	5	6	7																							
4	5	6	7	8																							
<p>What is the probability of the total being 2?</p>	<p>Handwritten solution:</p> $\frac{1}{16}$	<p>What is the probability of the total being over 6?</p> <p>Handwritten solution:</p> $\frac{3}{16}$																									
<p>Calculate the length of AB</p>	<p>Handwritten solution:</p> $a^2 + b^2 = c^2$ $7^2 + 24^2 = c^2$ $c^2 = 625 \quad c = 25$	<p>Not drawn accurately</p> 																									
<p>What is the reciprocal of 0.2?</p>	<p>Handwritten solution:</p> $0.2 = \frac{1}{5}$	<p>Handwritten solution:</p> 5																									

July 21	5-a-day	Higher
<p>A maths textbook has mass 800g to the nearest 100g.</p> <p>What is the greatest possible mass of 10 books?</p>	<p>A shelf can safely hold 30kg of books.</p> <p>How many books can safely be held by the shelf?</p>	<p>$850g$</p> <p>$850g \times 10 = 8.5kg$</p> <p>$30 \div 0.850 = 35.29$</p>
<p>£400 is invested at 5% interest per annum for 6 years.</p> <p>How much interest is earned?</p>	<p>£536.038... - £400</p> <p>£136.04</p>	
<p>Simplify $\sqrt{75}$</p>	<p>Simplify $\sqrt{1000}$</p>	
<p>Make u the subject</p>	<p>$v^2 - 2as = u^2$</p> <p>$u = \sqrt{v^2 - 2as}$</p>	
<p>Matt thinks of two consecutive numbers.</p> <p>He squares the numbers and works out the difference between them.</p> <p>He notices this is the same as the sum of the two consecutive numbers.</p> <p>Prove using algebra.</p>	<p>$(n+1)^2 - n^2$</p> <p>$(n^2 + 2n + 1) - n^2 = 2n + 1$</p> <p>$n+1 + n = 2n + 1$</p> <p>QED</p>	