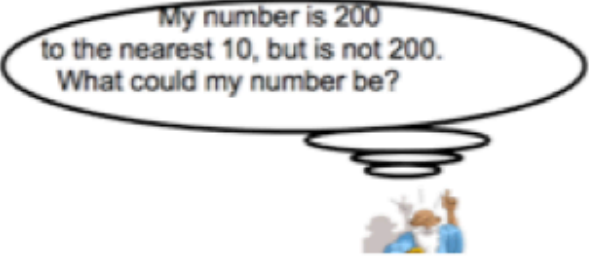

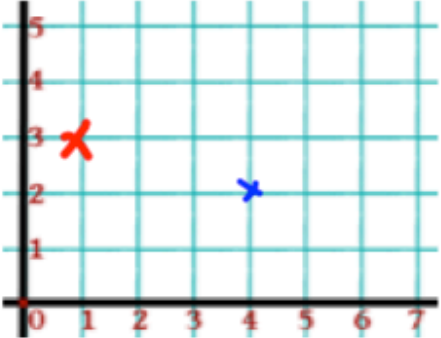
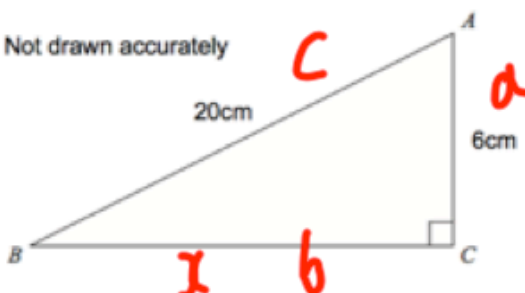

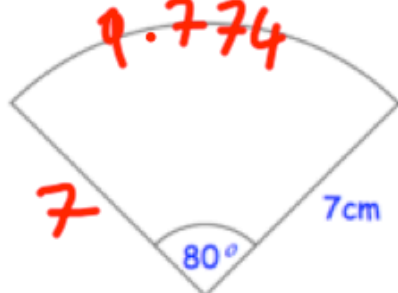


July 10th	5-a-day	Numeracy
<p>Write 6,300 in words</p> <p>Six thousand, three hundred.</p>	<p>Write four thousand and six in figures</p> <p>4006</p>	
<p>My number is 200 to the nearest 10, but is not 200. What could my number be?</p> 	<p>204 203 202</p> <p>201 199 198</p> <p>197 196 195</p> <p>any of these</p>	
<p>Simplify fully</p> $\frac{25}{35} \div 5 = \frac{5}{7}$		
<p>Fred scores 6 out of 10 in a test.</p> <p>Write this as a percentage</p> <p>60%</p>		<p>Donna scores 11 out of 20 in a test.</p> <p>Who performed better?</p> $\frac{11}{20} = \frac{55}{100} = 55\%$ <p>Fred</p>
<p>The <u>mean</u> of four numbers is 5.</p> <p>Three of the numbers are 2, 3 and 8.</p> <p>Work out the fourth number.</p>	$4 \times 5 = 20$ $2 + 3 + 8 + \square = 20$ <p>7</p>	

July 10	5-a-day	Foundation
<p>Martin asked 6 friends their age.</p> <p>21 23 23 28 29 30 34</p> <p>If a seventh friend has an age of 34, will the median decrease, increase or stay the same?</p>	<p>6 friends - median = 28 7 friends - median = 28 Stays the same</p>	
<p>Write 200 as a product of primes. Give your answer in index form.</p> <p>$2 \times 2 \times 2 \times 5 \times 5$ $2^3 \times 5^2$</p>		
<p>Factorise</p> <p>$y^2 - 7y$</p> <p>$y(y - 7)$</p>		
<p>The ratio of students to adults on a trip is 13:2</p> <p>If there are 8 adults, how many students are there?</p>	<p>$8 \div 2 = 4$ $4 \times 13 = 52$ students</p>	
	<p>Plot the point (1, 3) and label it A.</p> <p>A is translated by the vector</p> <p>$\begin{pmatrix} 3 \\ -1 \end{pmatrix}$ ← 3 right ← 1 down</p> <p>Plot the position of the new point</p>	

July 10	5-a-day	Higher
<p>Not drawn accurately</p> 	<p>Find the length of BC</p> $a^2 + b^2 = c^2$ $6^2 + x^2 = 20^2$ $36 + x^2 = 400$ $x^2 = 364$ $x = \sqrt{364}$ $= 19.08\text{cm}$	
<p>Calculate the volume of a cylinder with height 20cm and diameter 8cm.</p> 	$\pi \times 4^2 \times 20$ 1005.3cm^3	
	<p>Calculate the perimeter of this sector.</p> $\frac{80}{360} \times \pi \times 14 = 9.774$ $9.774 + 7 + 7 = 23.774\text{m}$	
<p>Evaluate</p> $49^{-1/2}$ $\frac{1}{49^{1/2}}$ $\frac{1}{7}$	$w(a+4) = 4(a-3)$ $aw + 4w = 4a - 12$ $aw - 4a = -12 - 4w$ $a(w-4) = -12 - 4w$ $a = \frac{-12 - 4w}{w-4}$ $\text{or } a = \frac{12 + 4w}{4-w}$	
<p>Make a the subject of:</p> $\frac{w(a+4)}{a-3} = 4$	<p>(This section contains the algebraic steps for making 'a' the subject, which are already included in the previous block.)</p>	