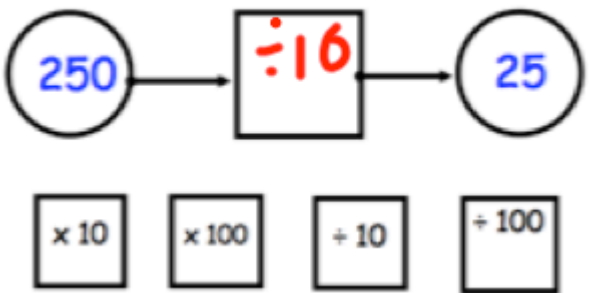


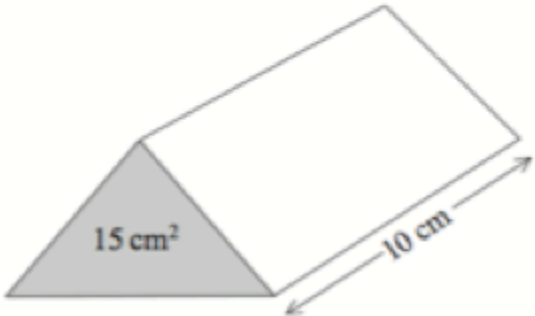
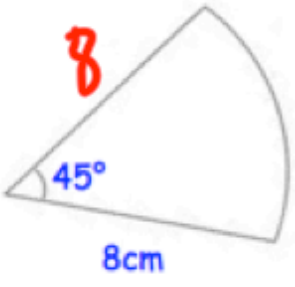
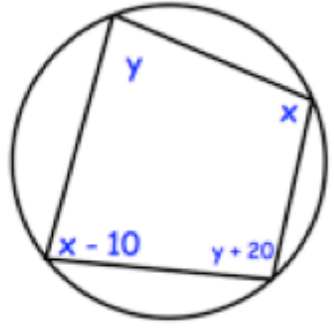


January 4th	5-a-day	Numeracy
Work out 93 subtract 35	$\begin{array}{r} 93 \\ - 35 \\ \hline 58 \end{array}$	
 <p>250 → $\div 10$ → 25</p> <p>$\times 10$ $\times 100$ $\div 10$ $\div 100$</p>		
Work out 8 squared.	64	
Work out 1.8 add 4.3	$\begin{array}{r} 4.3 \\ + 1.8 \\ \hline 6.1 \end{array}$	6.1
 <p>Type of angle: <u>obtuse</u></p>	 <p>Type of angle: <u>reflex</u></p>	

January 4th	5-a-day	Foundation
<p>Expand and simplify</p> $4(x+5)+3(x-7)$ $4x+20+3x-21$ $7x-1$	<p>Expand and simplify</p> $(x+3)(x+5)$ $x^2+8x+15$	
<p>Share £1200 in the ratio 2:3</p> $2+3=5$ $1200 \div 5$ $5 \overline{) 1200} \begin{array}{r} 240 \\ 0 \\ 240 \\ 0 \\ 240 \\ 0 \end{array}$	$240 \times 2 = 480$ $240 \times 3 = 720$	
	<p>Calculate the volume of this triangular prism</p> $15 \times 10 = 150 \text{ cm}^3$	
<p>Rearrange $y = \frac{1}{2}x + 1$ to make x the subject.</p> $y - 1 = \frac{1}{2}x$ $2y - 2 = x$		
<p>Find the highest common factor of 30 and 18</p> 6		$30: 1 \ 2 \ 3 \ 5 \ 6 \ 10 \ 15 \ 30$ $18: 1 \ 2 \ 3 \ 6 \ 9 \ 18$

January 4	5-a-day	Higher
<p>Solve $3x^2 = 192$</p> <p>$x^2 = 64$</p> <p>$x = -8$ or $x = 8$</p>		
<p>Find the perimeter of the sector.</p> 	<p>$\frac{45}{360} \times \pi \times 16 = 6.283... \text{ (or } 2\pi)$</p> <p>$16 + 6.283... = 22.28 \text{ cm}$</p> <p>or $2\pi + 16$</p>	
	<p>$x + x - 10 = 180$</p> <p>$2x - 10 = 180$</p> <p>$2x = 190$</p> <p>$x = 95$</p>	<p>$y + y + 20 = 180$</p> <p>$2y + 20 = 180$</p> <p>$2y = 160$</p> <p>$y = 80$</p>
<p>Solve these simultaneous equations</p> <p>$3x - 4y = 18$ $\times 5$</p> <p>$2x - 5y = 19$ $\times 4$</p> <p>$15x - 20y = 90$</p> <p>$8x - 20y = 76$ } subtract</p>	<p>$7x = 14$ $x = 2$</p> <p>$6 - 4y = 18$</p> <p>$-4y = 12$</p> <p>$y = -3$</p>	<p>$4 - 15 = 19$ ✓</p>
<p>w is inversely proportional to c squared.</p> <p>When $w = 100$, $c = 2$.</p> <p>Find w when $c = 4$.</p>	<p>$w \propto \frac{1}{c^2}$ $w = \frac{k}{c^2}$</p> <p>$100 = \frac{k}{2^2}$ $k = 400$</p> <p>$w = \frac{400}{4^2}$</p> <p>$w = 25$</p>	