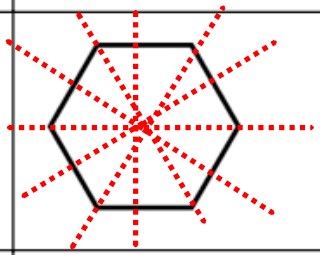
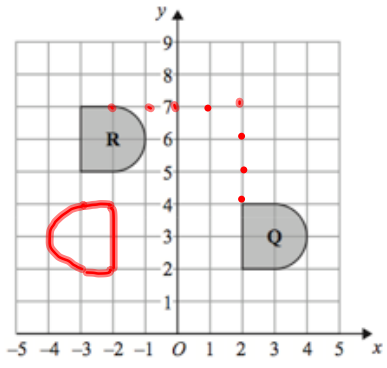
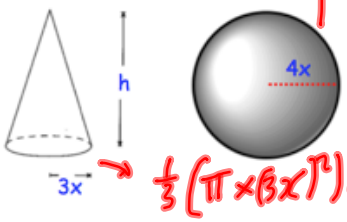
Name: _____

September 29th	**5-a-day**	**Numeracy**
Write down the first five multiples of 4. 4 8 12 16 20	Write down all the factors of 4. 1, 2, 4	
Simplify $\frac{6}{10}$ $\frac{3}{5}$		
Draw all lines of symmetry on the regular hexagon.		
What is the order of rotational symmetry of the regular hexagon? 6	Draw a shape with order of rotational symmetry 1. 	
Show that when you multiply two **consecutive** numbers that the answer is always even. Try three different examples.	1 x 2 = 2 2 x 3 = 6 3 x 4 = 12 4 x 5 = 20	

Name: _____

September 29	**5-a-day**	**Foundation**
$1\frac{2}{5} + 2\frac{1}{2}$ $\frac{7}{5} + \frac{5}{2}$	$\frac{14}{10} + \frac{25}{10} = \frac{39}{10}$ $3\frac{9}{10}$	
Work out the number of minutes from 19:27 on Tuesday to 01:39 on Wednesday 4 hrs 33 mins 1 hr 39 mins	240 + 60 + 33 + 39 372 minutes	
Factorise completely $15x^2 + 21x$ $3x(5x + 7)$		
	Describe the transformation that maps R onto Q. translation by $\begin{pmatrix} 5 \\ -3 \end{pmatrix}$ Reflect Q in the y-axis	

Name: _____

September 29	**5-a-day**	**Higher**
Expand and simplify $(w + 5)(w - 6)$ $w^2 - w - 30$	Factorise completely $4a^2 - 8a$ $4a(a-2)$	
Write 0.00000092 in standard form. 9.2×10^{-7}	Write 150×10^6 in standard form. 1.5×10^8	
A circle has circumference 80cm. Find the area. $D = 80 \div \pi \approx 25.46...$ $r = 12.73...$	$\pi \times (12.73...)^2$ $509.296 cm^2$	
Where does the line $y = 2x + 5$ cross the x-axis? $(-2.5, 0)$	The volume of the cone and sphere are equal. Find an expression for h in terms of x. cone $\frac{1}{3} \times \pi \times 9x^2 \times h = 3\pi x^2 h$ sphere $\frac{4}{3}\pi(64x^3) = \frac{256}{3}\pi x^3$ $3\pi x^2 h = \frac{256}{3}\pi x^3$ $3h = \frac{256}{3}x \quad h = \frac{256}{9}x$	
 $\frac{4}{3}\pi(4x)^3$ $\frac{1}{3}(\pi \times (3x)^2)h$		