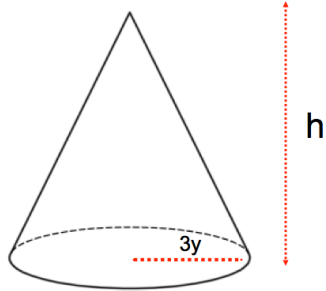
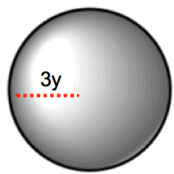


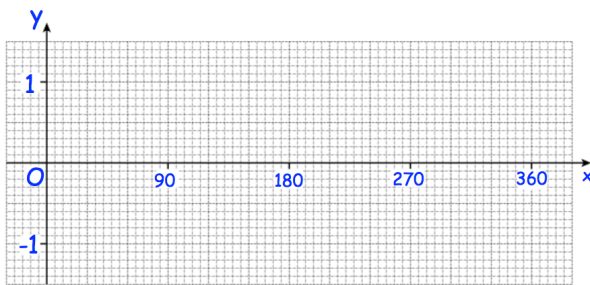


Express $x^2 + 8x + 40$ in the form $(x + a)^2 + b$



The volume of the cone is twice the volume of the sphere.

Express h in terms of y .



Sketch the graph of $y = -\sin x$ for $0 \leq x \leq 360$.

Given that $a = \sqrt{3}$ and $b = \sqrt{48}$

show that $(a + b)^2 = 75$

find the value of a^2

$$\mathbf{c} = \begin{pmatrix} -4 \\ q \end{pmatrix} \quad \mathbf{d} = \begin{pmatrix} p \\ 2 \end{pmatrix}$$

$$\text{Given } 3\mathbf{d} - \mathbf{c} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

Work out the values of p and q