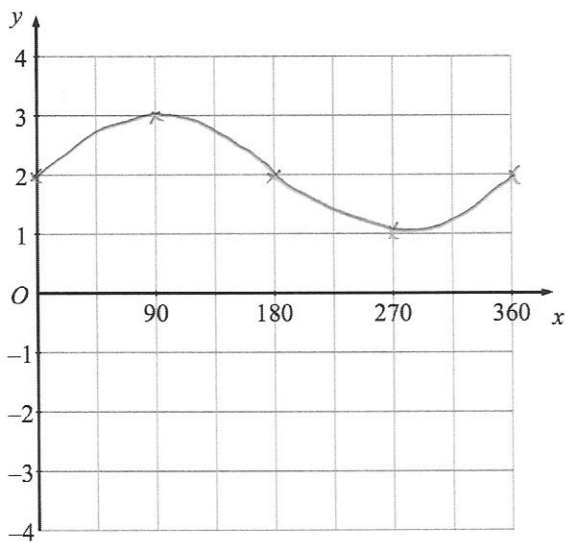
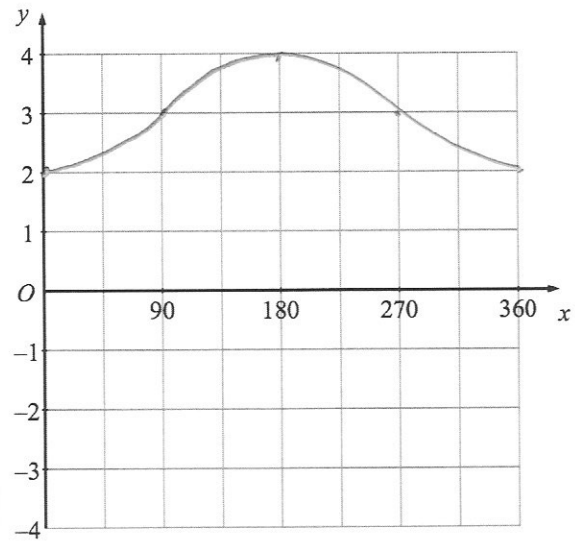
Find x

$$\sin x = \frac{5\sqrt{10}}{10\sqrt{10}}$$

$$\sin x = \frac{1}{2}$$

$$x = 30^\circ$$

Sketch $y = 2 + \sin x$ Sketch $y = 3 - \cos x$ 

$$x = 0.02\dot{2}\dot{7}$$

Show algebraically that x can bewritten as $\frac{1}{44}$

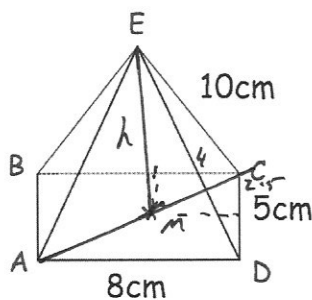
$$x = 0.02272727\dots$$

$$100x = 2.2727\dots$$

$$10000x = 227.2727\dots$$

$$9900x = 225$$

$$x = \frac{1}{44}$$



$$CM^2 = 4^2 + 2.5^2$$

$$CM^2 = 22.25$$

$$CM = \frac{\sqrt{89}}{2}$$

$$h^2 = 10^2 - \left(\frac{\sqrt{89}}{2}\right)^2$$

$$h = \frac{\sqrt{311}}{2}$$

Calculate the volume of the pyramid.

$$V = \frac{1}{3} \times 5 \times 8 \times \frac{\sqrt{311}}{2}$$

$$V = 117.568 \text{ cm}^3$$