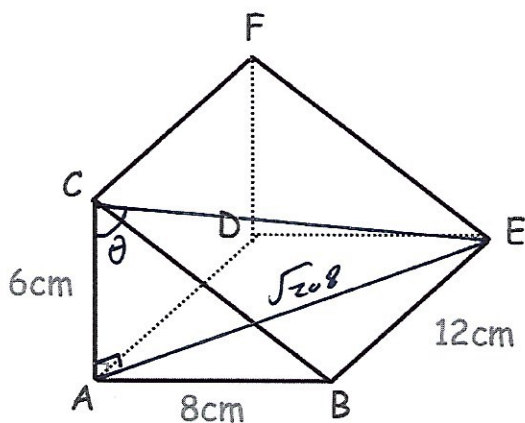


16th December



Corbettmaths

Shown below is a triangular prism.
Triangle ABC is a right angle triangle.



Calculate the size of angle ACE

$$AE = \sqrt{9^2 + 12^2} = \sqrt{208}$$

$$\tan \theta = \frac{\sqrt{208}}{6}$$

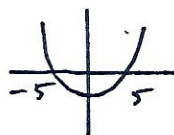
$$\theta = 67.41^\circ$$

Solve

$$y^2 \geq 25$$

$$y^2 - 25 \geq 0$$

$$(y-5)(y+5)$$



$$y \leq -5 \text{ or } y \geq 5$$

The first five terms of a sequence are shown below.

$$11, 15, 21, 29, 39 \dots$$

$$\begin{array}{cccccc} & 4 & 6 & 8 & 10 & \\ & \uparrow & \uparrow & \uparrow & \uparrow & \\ & 2 & 2 & 2 & & \end{array}$$

Work out an expression for the nth term of the sequence

$$a = 1 \quad 3a + b = 4$$

$$b = 1$$

$$a + b + c = 11$$

$$1 + 1 + c = 11$$

$$c = 9$$

$$n^2 + n + 9$$

$$y = \frac{2}{3}x^6$$

Work out $\frac{dy}{dx}$

$$\frac{dy}{dx} = 4x^5$$