

25th September



Corbettmaths

Write $\sqrt{11} + \sqrt{99}$ in the form $a\sqrt{b}$ where a and b are integers.

$$\sqrt{11} + \sqrt{9} \times \sqrt{11}$$

$$\sqrt{11} + 3\sqrt{11}$$

$$4\sqrt{11}$$

Find the minimum value of $x^2 + 6x + 20$ and the value of x for which it occurs.

$$(x+3)^2 - 9 + 20$$

$$(x+3)^2 + 11$$

$$(-3, 11)$$

Make m the subject of

$$\pi x = \frac{m+8}{m-1}$$

$$\pi x(m-1) = m+8$$

$$\pi mx - \pi x = m+8$$

$$\pi mx - m = 8 + \pi x$$

$$m(\pi x - 1) = 8 + \pi x$$

$$m = \frac{8 + \pi x}{\pi x - 1}$$

Shown is a sketch of the graph $y = f(x)$.

- (a) Sketch $-f(x)$
- (b) Sketch $f(x+1)$

Label known coordinates

