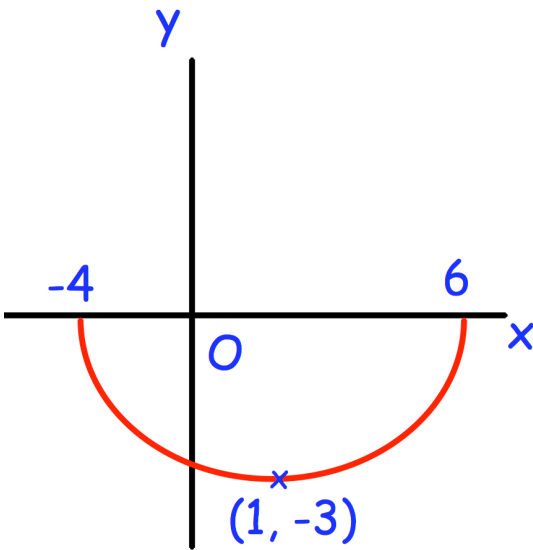


18th June



Corbettmaths

Shown is  $f(x)$ State the domain of  $f(x)$ State the range of  $f(x)$ How many solutions are there to  $f(x) + 1 = 0$  ?

A curve has gradient function

$$\frac{dy}{dx} = 3x^2 - 2x + 1$$

Work out the gradient of the curve when  $x = -2$ Make  $c$  the subject of

$$\frac{1}{a} + \frac{b}{4} - \frac{3}{c} + d^2 = 0$$

Prove

$$\tan\theta(\sin\theta + \cos\theta) \equiv \sin\theta(1 + \tan\theta)$$