

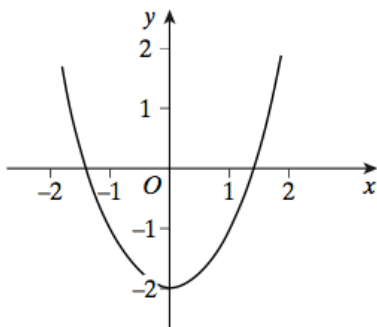
**28th January**

Corbettmaths

Factorise  $2y^2 + 5y + 3$ 

Find the equation of the straight line passing through the point (0, 6) which is perpendicular to the line

$$y = 3x + 1$$

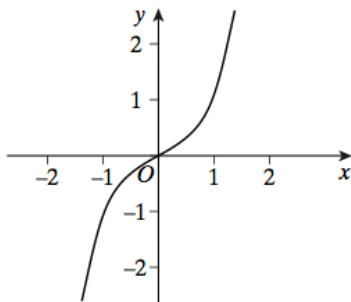


Circle the correct equation

$$y = x^2 - 2$$

$$y = x^3 - 2$$

$$x^2 + y^2 = 2$$



Circle the correct equation

$$y = x^2$$

$$y = x^3$$

$$x^2 + y^2 = 25$$

Mersenne primes are prime numbers that can be written in the form  $2^n - 1$  where  $n$  is a whole number.

If  $n = 5$ , is  $2^5 - 1$  a Mersenne prime?

If  $n = 8$ , is  $2^8 - 1$  a Mersenne prime?