

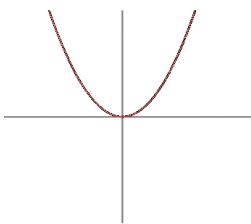


Factorise $2y^2 + 5y + 3$

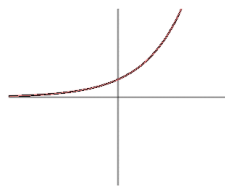
Find the equation of the straight line passing through the point (0, 6) which is perpendicular to the line

$$y = 3x + 1$$

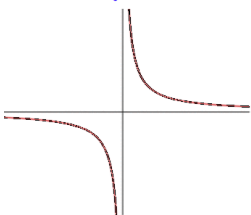
Graph A



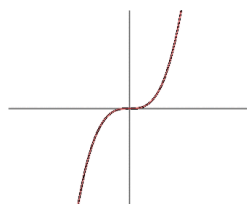
Graph B



Graph C



Graph D



$$y = x^2 \text{ is graph A}$$

$$y = x^3 \text{ is graph}$$

$$y = 2^x \text{ is graph}$$

$$y = \frac{1}{x} \text{ is graph}$$

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?