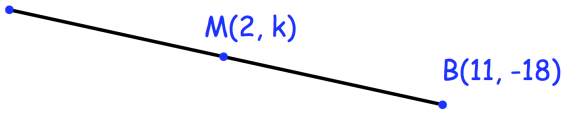


23rd November

Corbettmaths

 $A(-7, 6k)$  $B(11, -18)$ $M(2, k)$

M is the midpoint of AB
Work out the value of k

$$y = \frac{x^{12}}{3} + \frac{x^8}{4}$$

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

Simplify your answer

Prove that when any odd integer is squared, the result is always one more than a multiple of 8.

A curve has equation $y = x^2(4 - x)$

Work out the equation of the tangent to the curve at the point $(4, 0)$