Name: _____ 5-a-day Core 1

27th May

Corbettmaths

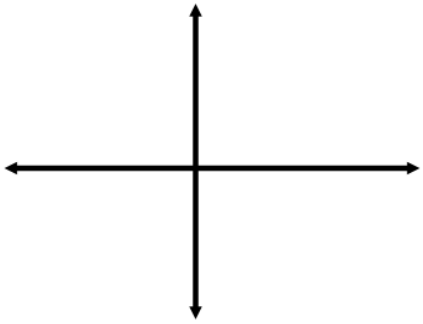
Factorise fully

$y = x^3 - 36x$

Sketch

$y = x^3 - 36x$

Showing any coordinates where the curve meets the axes.



Find, in terms of k, the 20th term of the arithmetic sequence

$(2k - 1), (5k + 1), (8k + 3), ...$

The curve C has equation

$y = x^3 + x - 12x^{\frac{1}{2}} \quad x > 0$

Show the point P(1, -10) lies on C

Find the equation of the tangent to C at P.