Name: _____ 5-a-day Core 1

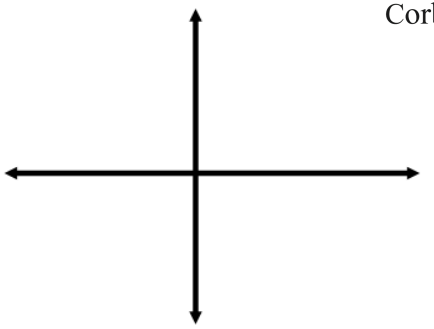
10th May

Corbettmaths

Given that

$$f(x) = \frac{1}{x}$$

Sketch the graph of y = f(–x)



The fifth term of an arithmetic series is 512.

The sum of the first 6 terms is 3009

Find a and d

The curve C has equation y = f(x)
Given that

$$\frac{dy}{dx} = 6x - \frac{2}{x^3}$$

and the point P (1, 0) lies on C

Find the equation of the tangent to C at P.

Find the equation of C

Find the real solutions to the equation

$x^4 = 6x^2 + 16$