Name: _____ 5-a-day Core 1

18th March

Corbettmaths

Given that

$$y = \frac{2}{x^3} \qquad x > 0$$

Find $\frac{dy}{dx}$

The points A, B and C have coordinates (9, 1), (0, 7) and (–3, –1) respectively.

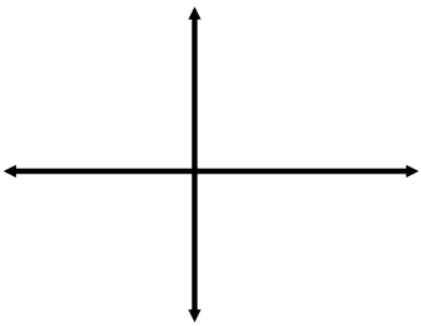
The midpoint of AB is D.
The midpoint of AC is E.

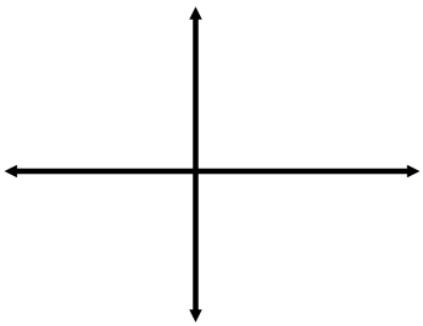
Find the equation of the line passing through D and E.

Sketch below

(a) $y = x(5 - x)$
(b) $y = x^2(2 - x)$

Showing clearly the coordinates of the points where the curves meet the axes





The curve C with equation $y = 2x^2 + 5x + 3$ has a tangent with equation $y = 11x + c$

Find c