Name: _____ 5-a-day Core 1

17th April

Corbettmaths

Find the set of values of x which satisfies both

$x^2 < 10 - 3x$
$9 - x \geq -3x + 2$

The first term of an arithmetic series is 9. The common difference is 4.

Find the sum of the first 40 terms.

Integrate with respect

$$\frac{8x^2 - 1}{4\sqrt{x}}$$

Find the coordinates where the line $y = 2x + 1$ meets the curve $y = x^2 - 3x + 5$

A curve $y = f(x)$ passes through the point (2, 10) and given

$$\frac{dy}{dx} = 4x^3 + 3$$

Find the value of y when x = 1