Name: _____ 5-a-day Core 1

19th April

Corbettmaths

Rationalise the denominator

$$\frac{1}{\sqrt{8}-3}$$

$4x^2 + ax + 7 = b(x + 2)^2 + c$

Find a, b and c

Solve the simultaneous equations

$y = x^2 - 3x + 5$
$6x - y - 3 = 0$

The fifth term of an arithmetic series is –5.
The nineteenth term is –31.

Find the sum of the first 20 terms.

The equation of a curve is
$y = 2x^3 - 3x^2 + x - 2$

Does the tangent to the curve at the point (2, 4) pass through the origin?