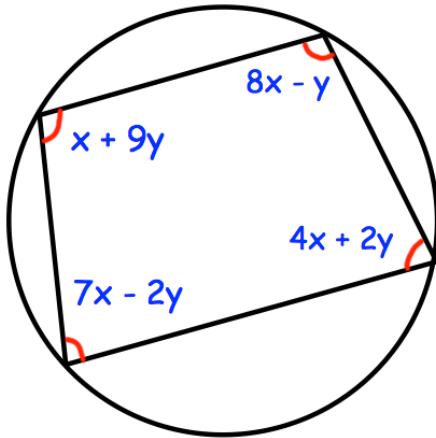


8th June



Corbettmaths

Shown is a cyclic quadrilateral

Find the values of x and y

$$f(x) = 3x^3 - 11x^2 + 8x + 4$$

Use factor theorem to show that $(3x + 1)$ is a factor of $f(x)$

Factorise $f(x)$ fully

$$y = (x^2 + 5)(1 - x)$$

Work out the value $\frac{d^2y}{dx^2}$ when $x = -1$