

**28th June**

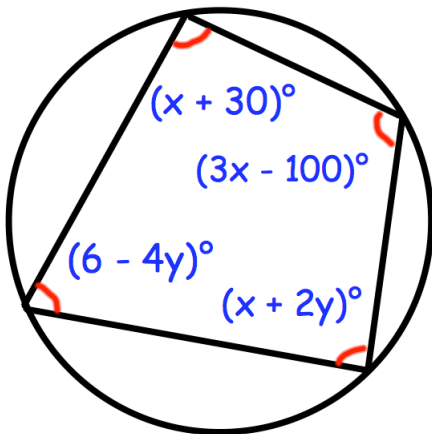
Corbettmaths

A circle has equation

$$(x + 7)^2 + (y - 1)^2 = 169$$

Write down the coordinates of 5 points on the circle.

$$y = 3x^4 - 9x$$

Work out  $\frac{dy}{dx}$ 

Shown is a cyclic quadrilateral.

Work out the values of  $x$  and  $y$ .

Prove algebraically that

$$(6n + 1)^2 - (2n - 1)$$
 is an even number

for all positive integer values of  $n$ .