12th August

Shown is a cyclic quadrilateral

8x - y

x + 9y

4x + 2y

7x - 2y
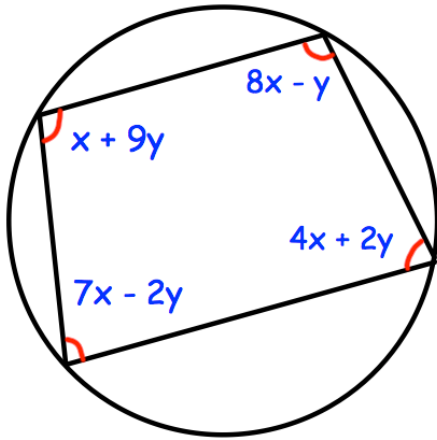
Find the values of x and y

For what values of x is
$y = x^2 + 8x + 12$ a decreasing function?

Use factor theorem to show that
$(x - 5)$ is a factor of $x^3 + x^2 - 30x$

Solve

$$\sqrt{5}cosx = sinx$$

$$0° \leq x \leq 360°$$