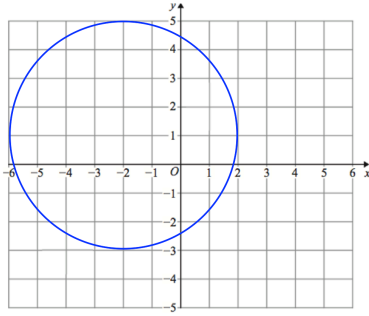


11th January

Corbettmaths



Find the equation of the circle

Factorise fully

$$(y + 3)^4 - (y + 3)^3(y - 1)$$

Do not attempt to expand brackets.

The first two terms in a linear sequence are $7 + 4\sqrt{6}$ and $\sqrt{6}$

What is the fourth term in the sequence?

$$A = \frac{8}{x+1} \quad \text{and} \quad B = \frac{3x+5}{x}$$

Given $5 - A - B = 0$

Work out the possible values of x .
Give your solutions to two decimal places.