

6th March

Corbettmaths

Simplify

$$\frac{x-1}{x+1} + \frac{x+4}{x^4} \div \frac{4x+16}{x}$$

Use Pascal's Triangle to work out the coefficient of x^3 in the expansion of

$$(1 + 3x)^4$$

$$y = 2x^4 - \frac{1}{x}$$

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

$$f(x) = \sqrt{x^2 + 8x - c}$$

with domain all values of x .Work out the possible values of c .