



Factorise

$$(2x - y)^2 - 5(2x - y)$$

$$(2x - y)[(2x - y) - 5]$$

$$(2x - y)(2x - y - 5)$$

n is an integer. From the expressions

$$4n \quad 6n - 1 \quad 2n^2 \quad n^2 + 1$$

Which expression(s) will always give an even number?

$$4n, 2n^2$$

Which expression(s) will always give an odd number?

$$6n - 1$$

Which expression(s) could give an even or odd number?

$$n^2 + 1$$

Expand and simplify

$$(2x - 5)(x + 1)(x - 3)$$

$$(2x^2 + 2x - 5x - 5)(x - 3)$$

$$(2x^2 - 3x - 5)(x - 3)$$

$$2x^3 - 6x^2 - 3x^2 + 9x - 5x + 15$$

$$2x^3 - 9x^2 + 4x + 15$$

C is directly proportional to  $w^3$ When  $C = 9000$ ,  $W = 10$ .

$$C \propto w^3$$

$$C = kw^3$$

Find C when  $W = 5$ .

$$9000 = k \times 1000$$

$$k = 9$$

$$C = 9w^3$$

$$9 \times 5^3$$

$$C = 1125$$

Simplify

$$\frac{2x^2 + 3x - 2}{2x^2 - 15x + 7}$$

$$2x^2 - 15x + 7$$

$$(2x - 1)(x + 2)$$

$$(2x - 1)(x - 7)$$

$$\frac{x + 2}{x - 7}$$

$$x - 7$$