

Unit 5 Intro To Polynomials

5.3A Distribution

We can multiply a monomial with a polynomial by distribution.

Ex. Simplify (get rid of brackets/multiply)

Distribute – multiply each term of the polynomial in the brackets by the monomial outside the brackets

a) $2(3x + 5y)$

$$= 6x + 10y$$

b) $-3(4x - 2y)$

$$= -12x + 6y$$

c) $(m - 6n)3 = 3(m - 6n)$

$$= 3m - 18n$$

d) $5(3x + 2) + 4x$

$$= 15x + 10 + 4x$$

$$= 19x + 10$$

e) $5 + 6(2q - 1)$

$$= 5 + 12q - 6$$

$$= 12q - 1$$

f) $7a - 2(3a + 2b)$

$$= 7a - 6a - 4b$$

$$= a - 4b$$

g) $3p - 5(-2p + 3q) + q$

$$= 3p + 10p - 15q + q$$

$$= 13p - 14q$$

h) $3(5x - y) + 4(2x + 3y)$

$$= 15x - 3y + 8x + 12y$$

$$= 23x + 9y$$