

Expansion of single brackets

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

The term outside the bracket will be multiplied all the terms which are inside the brackets. Here two terms are inside the brackets so we will get two terms after multiplication.

$$\begin{aligned} & -3x^2y (2x - 3y) \quad (\text{Here both term will be multiplied by } -3x^2y) \\ & - 6x^3y + 9x^2y^2 \quad (-3x^2y \times 2x = -6x^3y \text{ and } -3x^2y \times -3y = +9x^2y^2) \end{aligned}$$

1) Expand the single brackets.

a) $x(3x+4)$

= _____

b) $9x(x+3y)$

= _____

c) $3xy(x+2y)$

= _____

d) $13y^2(x+y)$

= _____

e) $4xy(x^2+3y)$

= _____

f) $4xy(3x^2-2y)$

= _____

g) $3xy^2(x+2y)$

= _____

h) $5p^3(2p - 5q)$

= _____

i) $4x^3y(x^2+y^2)$

= _____

j) $5x^2y^2(x+5y)$

= _____

Expand and simplify

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

= _____

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

= _____

4) $2(3a - 2) - (a - 2)$

= _____

5) $2(3p + 5) - 7(2p + 5)$

= _____

6) $7(4x - 1) - 2(2x + 1)$

= _____

7) $3(5x - 3y) - 4(3x + 2y)$

= _____

8) $2x(3x+y) + 3(3x+y)$

= _____

9) $x(2x + 3y) - x(5x - 2y)$

= _____

10) $3p(5p + 3q) - 2(5p + 3q)$

= _____

11) $x(x + 3) + 2(x + 3)$

= _____