

EXPANDING BRACKETS (SINGLE)

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Worked example

Expand:

$$2(3x + 4)$$

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

$$2(3x + 4y + z)$$

$$2(3x + 4y + z + 5)$$

Your turn

Expand:

$$5(4a + 3b + 2c + 1)$$

$$20a + 15b + 10c + 5$$

Worked example

Expand:

$$1(x + 3)$$

$$2 + (x + 3)$$

$$2 - (x + 3)$$

$$2 - (x + 3)$$

Your turn

Expand:

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

$$2a + 5$$

Worked example

Expand:

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

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

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

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

Your turn

Expand:

$$7 - (5a - 2)$$

$$9 - 5a$$

$$8 - (-4 - 3b)$$

$$12 + 3b$$

Worked example

Your turn

Expand:

$$2(3x + 5) \quad -2(3x + 5)$$

$$2(3x - 5) \quad -2(3x - 5)$$

$$2(-3x - 5) \quad -2(-3x - 5)$$

$$2(5 - 3x) \quad -2(5 - 3x)$$

Expand:

$$5(2a - 3)$$

$$10a - 15$$

$$-3(5b - 2)$$

$$-15b + 6$$

$$-3(5 + 2c)$$

$$-15 - 6c$$

Worked example

Expand:

$$x(x + 5)$$

$$2x(x - 5)$$

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

Your turn

Expand:

$$5a(3a - 2)$$

$$15a^2 - 10a$$

Worked example

Expand:

$$2(3x + 5)$$

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

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

Your turn

Expand:

$$3(5a + 2)$$

$$15a + 6$$

$$3(5a + 2b)$$

$$15a + 6b$$

$$3a(5a + 2b)$$

$$15a^2 + 6ab$$

Worked example

Expand:

$$2xy(5 + x)$$

$$7rs(3 + 2r)$$

Your turn

Expand:

$$3ab(2 + 5a)$$

$$6ab + 15a^2b$$

Worked example

Expand:

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

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

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

$$kx^n(ax + b)$$

Your turn

Expand:

$$5a^4(3a - 2)$$

$$15a^5 - 10a^4$$

Worked example

Expand and simplify:

$$3(2x + 5) + 4(6x + 1)$$

$$3(2x - 5) + 4(6x - 1)$$

Your turn

Expand and simplify:

$$5(3a - 2) + 3(2a - 5)$$

$$21a - 25$$

Worked example

Expand and simplify:

$$3(2x + 5) - 4(6x + 7)$$

$$3(2x - 5) - 4(6x - 7)$$

$$3(5 - 2x) - 4(-6x - 7)$$

Your turn

Expand and simplify:

$$5(3a - 2) - 4(2a - 1)$$

$$7a - 6$$

Worked example

Expand and simplify:

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

Your turn

Expand and simplify:

$$7(3 - 4a) - 2(-5a + 9)$$

$$-18a + 3$$