

Expanding Brackets

$$2(x + 4) = 2x + 8$$

$$3(x + 1) = 3x + 3$$

$$2(1 + x) = 2 + 2x$$

$$2(x + 4) = 2x + 8$$

$$4(7 + x) = 28 + 4x$$

$$5(x + 2) = 5x + 10$$

$$7(3 + x) = 21 + 7x$$

$$2(x + 8) = 2x + 16$$

$$3(4 + y) = 12 + 3y$$

$$6(x + 3) = 6x + 18$$

$$14(2 + b) = 28 + 14b$$

$$7(x + 7) = 7x + 49$$

$$8(5 + d) = 40 + 8d$$

$$11(x + 1) = 11x + 11$$

$$5(6 + a) = 30 + 5a$$

$$9(x + 8) = 9x + 72$$

$$11(8 + c) = 88 + 11c$$

$$4(x + 7) = 4x + 28$$

$$22(3 + f) = 66 + 22f$$

$$3(x + 21) = 3x + 63$$

$$6(0.5 + x) = 3 + 6x$$

$$4(a + 1) = 4a + 4$$

$$3(x - 2) = 3x - 6$$

$$5(y + 10) = 5y + 50$$

$$5(x - 1) = 5x - 5$$

$$7(y + 3) = 7y + 21$$

$$2(x - 9) = 2x - 18$$

$$12(b + 6) = 12b + 72$$

$$7(x - 3) = 7x - 21$$

$$2(g + 4) = 2g + 8$$

$$14(x - 2) = 14x - 28$$

Expanding Brackets - Part 2

$$6(y - 2) = 6y - 12$$

$$7(3y + 4) = 21y + 28$$

$$6(9 - x) = 54 - 6x$$

$$8(2g - 2) = 16g - 16$$

$$2(1 - x) = 2 - 2x$$

$$9(1 + 2x) = 9 + 18x$$

$$5(r - 10) = 5r - 50$$

$$6(3 - 4x) = 18 - 24x$$

$$3(t - 4) = 3t - 12$$

$$3(2 - 3p) = 6 - 9p$$

$$10(p - 7) = 10p - 70$$

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

$$2(a - 34) = 2a - 68$$

$$5(x - 5) + 3(2x - 3) = 11x - 34$$

$$4(3 - t) = 12 - 4t$$

$$4(2x + 3) + 2(3x - 1) = 14x + 10$$

$$7(6 - y) = 42 - 7y$$

$$6(2x + 4y) + 5(3x - 6y) = 27x - 6y$$

$$10(10 - y) = 100 - 10y$$

$$3(x + y) + 2(x + 2y) = 5x + 7y$$

$$2(2x + 9) = 4x + 18$$

$$4(3x + 1) = 12x + 4$$

$$2x(a + c) = 2ax + 2cx$$

$$5(5x + 5) = 25x + 25$$

$$3x(2z - 3y) = 6xz - 9xy$$

$$4(5y + 2) = 20y + 8$$

$$3(a - 2c) + 2(3a - 6c) = 9a - 18c$$

Jordan writes $3(4x - 8) = 12x - 8$. Explain why his expansion is not correct. $3(4x - 8) = 12x - 24$

Extension

$$x(2y - x) = 2xy - x^2$$

$$\begin{aligned} a^2b(a - b) + a^2b^2 &= \\ &= a^3b - a^2b^2 + a^2b^2 = a^3b \end{aligned}$$

$$xy(y - x) = xy^2 - x^2y$$

$$\begin{aligned} a(b + 1) + b(c + 1) - d &= \\ &= ab + bc + a + b - d \end{aligned}$$

$$x^2(x + 1) = x^3 + x^2$$

$$p(1 + q) - q(p + 1) = p - q$$

$$9y(y^2 - xy) = 9y^3 - 9xy^2$$