

1 Supprime les parenthèses puis réduis les expressions suivantes :

$$\begin{array}{l} A = 5 + (2x + 3) \\ B = 5x - (3 - 4x) \\ C = (x - 4) - 6 \end{array} \quad \begin{array}{l} D = (4x + 2) + (-6x - 2) \\ E = -(-3x - 1) + (x - 3) \\ F = 8x - (5x + 2) + (3 - 4x) \end{array}$$

2 Supprime les parenthèses puis réduis les expressions suivantes :

$$\begin{array}{l} A = (x + 3) + (4x - 5) \\ B = 6 - 2t - (4t - 8) \\ C = -(8a + 3) - 4a \end{array} \quad \begin{array}{l} D = (3y + 7) + (-5y + 3) \\ E = 5z - 6 - (7 - 2z) + 3z \\ F = (3 - 4x) - (-2x + 8) \end{array}$$

$$\begin{array}{ll} A = 5 + 2x + 3 & D = 4x + 2 - 6x - 2 \\ A = 2x + 8 & D = -2x (+0) \\ B = 5x - 3 + 4x & E = 3x + 1 + x - 3 \\ B = 9x - 3 & E = 4x - 2 \\ C = x - 4 - 6 & F = 8x - 5x - 2 + 3 - 4x \\ C = x - 10 & F = -x + 1 \end{array} \quad \begin{array}{ll} A = x + 3 + 4x - 5 & D = 3y + 7 - 5y + 3 \\ A = 5x - 2 & D = -2y + 10 \\ B = 6 - 2t - 4t + 8 & E = 5z - 6 - 7 + 2z + 3z \\ B = -6t + 14 & E = 10z - 13 \\ C = -8a - 3 - 4a & F = 3 - 4x + 2x - 8 \\ C = -12a - 3 & F = -2x - 5 \end{array}$$

14 Développe les expressions suivantes :

$$\begin{array}{l} A = (-3 + y) \times 9 \\ B = -6(2x - 7) \\ C = (3t + 2) \times 8 \end{array} \quad \begin{array}{l} D = -8(9 - 7x) \\ E = -8z(4 - 3z) \\ F = 3y(-4 + 6y) \end{array}$$

$$\begin{array}{ll} A = -3 \times 9 + y \times 9 & D = -8 \times 9 - (-8) \times 7x \\ A = -27 + 9y & D = -72 + 56x \\ B = -6 \times 2x - (-6) \times 7 & E = -8z \times 4 - (-8z) \times 3z \\ B = -12x + 42 & E = -32z + 24z^2 \\ C = 3t \times 8 + 2 \times 8 & F = 3y \times (-4) + 3y \times 6y \\ C = 24t + 16 & F = -12y + 18y^2 \end{array}$$

16 Développe et réduis les expressions :

$$\begin{array}{l} A = 11 + 2(x - 6) \\ B = -3(2y - 4) - 2y \\ C = 7 - 4(8 - 2a) + a \end{array} \quad \begin{array}{l} D = -15 - 9(-5 + 3b) \\ E = -5(6 - 3z) - 9 + z \\ F = 12x - 4(6 - 3x) \end{array}$$

$$\begin{array}{ll} A = 11 + 2 \times x - 2 \times 6 & D = -15 - 9 \times (-5) + (-9) \times 3b \\ A = 11 + 2x - 12 & D = -15 + 45 - 27b \\ A = 2x - 1 & D = 30 - 27b \\ B = -3 \times 2y - (-3) \times 4 - 2y & E = -5 \times 6 - (-5) \times 3z - 9 + z \\ B = -6y + 12 - 2y & E = -30 + 15z - 9 + z \\ B = -8y + 12 & E = 16z - 39 \\ C = 7 - 4 \times 8 - (-4) \times 2a + a & F = 12x - 4 \times 6 - (-4) \times 3x \\ C = 7 - 32 + 8a + a & F = 12x - 24 + 12x \\ C = 9a - 26 & F = 24x - 24 \end{array}$$

7 Développe puis réduis chaque expression.

$$\begin{array}{l} A = 5(t + 3) + 2(3t + 4) - (5t - 3) \\ B = -3y(2 + 5y) - 4(1 - 2y) + (3y^2 - 5y + 3) \end{array}$$

$$\begin{array}{l} A = 5 \times t + 5 \times 3 + 2 \times 3t + 2 \times 4 - 5t + 3 \\ A = 5t + 15 + 6t + 8 - 5t + 3 \\ A = 6t + 26 \end{array} \quad \begin{array}{l} B = -3y \times 2 + (-3y) \times 5y - 4 \times 1 - (-4) \times 2y + 3y^2 - 5y + 3 \\ B = -6y - 15y^2 - 4 + 8y + 3y^2 - 5y + 3 \\ B = -12y^2 - 3y - 1 \end{array}$$