

Exercice 1

Développer et réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 4 \times 2x \\ B = 4x \times 2 \\ C = -4x + 1 + 2 \times (8x + 5) \end{array} \quad \left| \quad \begin{array}{l} D = 9x + (9x - 8) \times 9 \\ E = (-7x - 2) \times 6 - 6 \end{array} \right.$$

Exercice 2

Développer et réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 4 \times 5x \\ B = 9 \times 7x \\ C = (4x - 6) \times 10 + 1 \end{array} \quad \left| \quad \begin{array}{l} D = 2 \times (6x + 6) - 4x + 6 \\ E = (5x - 1) \times 2 + 5x \end{array} \right.$$

Exercice 3

Développer et réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 8x \times 3 \\ B = 2 \times 9x \\ C = (-9x - 1) \times 8 + 7x - 5 \end{array} \quad \left| \quad \begin{array}{l} D = (8x + 6) \times 5 + 9 \\ E = -4x + 5 \times (5x + 2) \end{array} \right.$$

Exercice 4

Développer et réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 7x \times 3 \\ B = 9 \times 2x \\ C = (-x - 3) \times 6 + 6x \end{array} \quad \left| \quad \begin{array}{l} D = (8x - 1) \times 10 + 6 \\ E = x + 10 + 10 \times (2x - 9) \end{array} \right.$$

Exercice 5

Développer et réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 7x \times 6 \\ B = 5 \times 3x \\ C = 10 \times (4x + 1) - 7 \end{array} \quad \left| \quad \begin{array}{l} D = -2x - 9 + 9 \times (-7x + 9) \\ E = 9x + (-8x - 9) \times 3 \end{array} \right.$$

Corrigé de l'exercice 1

Développer et réduire chacune des expressions littérales suivantes :

$$A = 4 \times 2x$$

$$A = 4 \times 2 \times x$$

$$A = 8x$$

$$B = 4x \times 2$$

$$B = 4 \times x \times 2$$

$$B = 4 \times 2 \times x$$

$$B = 8x$$

$$C = -4x + 1 + 2 \times (8x + 5)$$

$$C = -4x + 1 + 2 \times 8x + 2 \times 5$$

$$C = -4x + 1 + 2 \times 8 \times x + 10$$

$$C = -4x + 1 + 16x + 10$$

$$C = -4x + 16x + 1 + 10$$

$$C = (-4 + 16)x + 11$$

$$C = 12x + 11$$

$$D = 9x + (9x - 8) \times 9$$

$$D = 9x + 9x \times 9 - 8 \times 9$$

$$D = 9x + 9 \times x \times 9 - 72$$

$$D = 9x + 9 \times 9 \times x - 72$$

$$D = 9x + 81x - 72$$

$$D = (9 + 81)x - 72$$

$$D = 90x - 72$$

$$E = (-7x - 2) \times 6 - 6$$

$$E = -7x \times 6 - 2 \times 6 - 6$$

$$E = -7 \times x \times 6 - 12 - 6$$

$$E = -7 \times 6 \times x - 18$$

$$E = -42x - 18$$

Corrigé de l'exercice 2

Développer et réduire chacune des expressions littérales suivantes :

$$A = 4 \times 5x$$

$$A = 4 \times 5 \times x$$

$$A = 20x$$

$$B = 9 \times 7x$$

$$B = 9 \times 7 \times x$$

$$B = 63x$$

$$C = (4x - 6) \times 10 + 1$$

$$C = 4x \times 10 - 6 \times 10 + 1$$

$$C = 4 \times x \times 10 - 60 + 1$$

$$C = 4 \times 10 \times x - 59$$

$$C = 40x - 59$$

$$D = 2 \times (6x + 6) - 4x + 6$$

$$D = 2 \times 6x + 2 \times 6 - 4x + 6$$

$$D = 2 \times 6 \times x + 12 - 4x + 6$$

$$D = 12x - 4x + 12 + 6$$

$$D = (12 - 4)x + 18$$

$$D = 8x + 18$$

$$E = (5x - 1) \times 2 + 5x$$

$$E = 5x \times 2 - 1 \times 2 + 5x$$

$$E = 5 \times x \times 2 - 2 + 5x$$

$$E = 5 \times 2 \times x + 5x - 2$$

$$E = 10x + 5x - 2$$

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

$$E = 15x - 2$$

Corrigé de l'exercice 3

Développer et réduire chacune des expressions littérales suivantes :

$$A = 8x \times 3$$

$$A = 8 \times x \times 3$$

$$A = 8 \times 3 \times x$$

$$A = 24x$$

$$B = 2 \times 9x$$

$$B = 2 \times 9 \times x$$

$$B = 18x$$

$$C = (-9x - 1) \times 8 + 7x - 5$$

$$C = -9x \times 8 - 1 \times 8 + 7x - 5$$

$$C = -9 \times x \times 8 - 8 + 7x - 5$$

$$C = -9 \times 8 \times x + 7x - 8 - 5$$

$$C = -72x + 7x - 8 - 5$$

$$C = (-72 + 7)x - 13$$

$$C = -65x - 13$$

$$D = (8x + 6) \times 5 + 9$$

$$D = 8x \times 5 + 6 \times 5 + 9$$

$$D = 8 \times x \times 5 + 30 + 9$$

$$D = 8 \times 5 \times x + 39$$

$$D = 40x + 39$$

$$E = -4x + 5 \times (5x + 2)$$

$$E = -4x + 5 \times 5x + 5 \times 2$$

$$E = -4x + 5 \times 5 \times x + 10$$

$$E = -4x + 25x + 10$$

$$E = (-4 + 25)x + 10$$

$$E = 21x + 10$$

Corrigé de l'exercice 4

Développer et réduire chacune des expressions littérales suivantes :

$$A = 7x \times 3$$

$$A = 7 \times x \times 3$$

$$A = 7 \times 3 \times x$$

$$A = 21x$$

$$B = 9 \times 2x$$

$$B = 9 \times 2 \times x$$

$$B = 18x$$

$$C = (-x - 3) \times 6 + 6x$$

$$C = -x \times 6 - 3 \times 6 + 6x$$

$$C = -1 \times x \times 6 - 18 + 6x$$

$$C = -1 \times 6 \times x + 6x - 18$$

$$C = -6x + 6x - 18$$

$$C = (-6 + 6)x - 18$$

$$C = -18$$

$$D = (8x - 1) \times 10 + 6$$

$$D = 8x \times 10 - 1 \times 10 + 6$$

$$D = 8 \times x \times 10 - 10 + 6$$

$$D = 8 \times 10 \times x - 4$$

$$D = 80x - 4$$

$$E = x + 10 + 10 \times (2x - 9)$$

$$E = x + 10 + 10 \times 2x + 10 \times (-9)$$

$$E = x + 10 + 10 \times 2 \times x - 90$$

$$E = x + 10 + 20x - 90$$

$$E = x + 20x + 10 - 90$$

$$E = (1 + 20)x - 80$$

$$E = 21x - 80$$

Corrigé de l'exercice 5

Développer et réduire chacune des expressions littérales suivantes :

$$A = 7x \times 6$$

$$A = 7 \times x \times 6$$

$$A = 7 \times 6 \times x$$

$$A = 42x$$

$$B = 5 \times 3x$$

$$B = 5 \times 3 \times x$$

$$B = 15x$$

$$C = 10 \times (4x + 1) - 7$$

$$C = 10 \times 4x + 10 \times 1 - 7$$

$$C = 10 \times 4 \times x + 10 - 7$$

$$C = 40x + 3$$

$$D = -2x - 9 + 9 \times (-7x + 9)$$

$$D = -2x - 9 + 9 \times (-7x) + 9 \times 9$$

$$D = -2x - 9 + 9 \times (-7) \times x + 81$$

$$D = -2x - 9 - 63x + 81$$

$$D = -2x - 63x - 9 + 81$$

$$D = (-2 - 63)x + 72$$

$$D = -65x + 72$$

$$E = 9x + (-8x - 9) \times 3$$

$$E = 9x - 8x \times 3 - 9 \times 3$$

$$E = 9x - 8 \times x \times 3 - 27$$

$$E = 9x - 8 \times 3 \times x - 27$$

$$E = 9x - 24x - 27$$

$$E = (9 - 24)x - 27$$

$$E = -15x - 27$$