

**Exercice 1**

Développer et réduire chacune des expressions littérales suivantes :

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

**Exercice 2**

Développer et réduire chacune des expressions littérales suivantes :

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

**Exercice 3**

Développer et réduire chacune des expressions littérales suivantes :

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

**Exercice 4**

Développer et réduire chacune des expressions littérales suivantes :

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

**Exercice 5**

Développer et réduire chacune des expressions littérales suivantes :

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

**Corrigé de l'exercice 1**

Développer et réduire chacune des expressions littérales suivantes :

$$A = 3 \times 7x$$

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

$$A = 21x$$

$$B = 5 \times 4x$$

$$B = 5 \times 4 \times x$$

$$B = 20x$$

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

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

$$C = x + 7 - 1 \times x \times 9 + 81$$

$$C = x + 7 - 1 \times 9 \times x + 81$$

$$C = x + 7 - 9x + 81$$

$$C = x - 9x + 7 + 81$$

$$C = (1 - 9)x + 88$$

$$C = -8x + 88$$

$$D = (-10x + 2) \times 10 + 3$$

$$D = -10x \times 10 + 2 \times 10 + 3$$

$$D = -10 \times x \times 10 + 20 + 3$$

$$D = -10 \times 10 \times x + 23$$

$$D = -100x + 23$$

$$E = (-10x + 8) \times 9 - 8x$$

$$E = -10x \times 9 + 8 \times 9 - 8x$$

$$E = -10 \times x \times 9 + 72 - 8x$$

$$E = -10 \times 9 \times x - 8x + 72$$

$$E = -90x - 8x + 72$$

$$E = (-90 - 8)x + 72$$

$$E = -98x + 72$$

**Corrigé de l'exercice 2**

Développer et réduire chacune des expressions littérales suivantes :

$$A = 3 \times 8x$$

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

$$A = 24x$$

$$B = 3 \times 9x$$

$$B = 3 \times 9 \times x$$

$$B = 27x$$

$$C = (2x + 4) \times 9 + 9x - 7$$

$$C = 2x \times 9 + 4 \times 9 + 9x - 7$$

$$C = 2 \times x \times 9 + 36 + 9x - 7$$

$$C = 2 \times 9 \times x + 9x + 36 - 7$$

$$C = 18x + 9x + 36 - 7$$

$$C = (18 + 9)x + 29$$

$$C = 27x + 29$$

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

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

$$D = -2 + 2 \times (-4) \times x + 12$$

$$D = -2 - 8x + 12$$

$$D = -8x - 2 + 12$$

$$D = -8x + 10$$

$$E = (5x + 10) \times 8 + 8x$$

$$E = 5x \times 8 + 10 \times 8 + 8x$$

$$E = 5 \times x \times 8 + 80 + 8x$$

$$E = 5 \times 8 \times x + 8x + 80$$

$$E = 40x + 8x + 80$$

$$E = (40 + 8)x + 80$$

$$E = 48x + 80$$

**Corrigé de l'exercice 3**

Développer et réduire chacune des expressions littérales suivantes :

$$A = 2x \times 2$$

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

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

$$A = 4x$$

$$B = 2 \times 4x$$

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

$$B = 8x$$

$$C = -2 + (-7x - 9) \times 6$$

$$C = -2 - 7x \times 6 - 9 \times 6$$

$$C = -2 - 7 \times x \times 6 - 54$$

$$C = -2 - 7 \times 6 \times x - 54$$

$$C = -2 - 42x - 54$$

$$C = -42x - 2 - 54$$

$$C = -42x - 56$$

$$D = -9x + 10 + (-8x + 6) \times 9$$

$$D = -9x + 10 - 8x \times 9 + 6 \times 9$$

$$D = -9x + 10 - 8 \times x \times 9 + 54$$

$$D = -9x + 10 - 8 \times 9 \times x + 54$$

$$D = -9x + 10 - 72x + 54$$

$$D = -9x - 72x + 10 + 54$$

$$D = (-9 - 72)x + 64$$

$$D = -81x + 64$$

$$E = 9x + (5x + 9) \times 7$$

$$E = 9x + 5x \times 7 + 9 \times 7$$

$$E = 9x + 5 \times x \times 7 + 63$$

$$E = 9x + 5 \times 7 \times x + 63$$

$$E = 9x + 35x + 63$$

$$E = (9 + 35)x + 63$$

$$E = 44x + 63$$

### Corrigé de l'exercice 4

Développer et réduire chacune des expressions littérales suivantes :

$$A = 7 \times 5x$$

$$A = 7 \times 5 \times x$$

$$A = 35x$$

$$B = 8 \times 5x$$

$$B = 8 \times 5 \times x$$

$$B = 40x$$

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

$$C = -10x \times 9 + 2 \times 9 + 2x$$

$$C = -10 \times x \times 9 + 18 + 2x$$

$$C = -10 \times 9 \times x + 2x + 18$$

$$C = -90x + 2x + 18$$

$$C = (-90 + 2)x + 18$$

$$C = -88x + 18$$

$$D = -10x - 1 + 7 \times (-8x + 6)$$

$$D = -10x - 1 + 7 \times (-8x) + 7 \times 6$$

$$D = -10x - 1 + 7 \times (-8) \times x + 42$$

$$D = -10x - 1 - 56x + 42$$

$$D = -10x - 56x - 1 + 42$$

$$D = (-10 - 56)x + 41$$

$$D = -66x + 41$$

$$E = (6x - 2) \times 5 + 9$$

$$E = 6x \times 5 - 2 \times 5 + 9$$

$$E = 6 \times x \times 5 - 10 + 9$$

$$E = 6 \times 5 \times x - 1$$

$$E = 30x - 1$$

### Corrigé de l'exercice 5

Développer et réduire chacune des expressions littérales suivantes :

$$A = 5 \times 8x$$

$$A = 5 \times 8 \times x$$

$$A = 40x$$

$$B = 6x \times 7$$

$$B = 6 \times x \times 7$$

$$B = 6 \times 7 \times x$$

$$B = 42x$$

$$C = -8x + (-10x - 3) \times 7$$

$$C = -8x - 10x \times 7 - 3 \times 7$$

$$C = -8x - 10 \times x \times 7 - 21$$

$$C = -8x - 10 \times 7 \times x - 21$$

$$C = -8x - 70x - 21$$

$$C = (-8 - 70)x - 21$$

$$C = -78x - 21$$

$$D = (-10x - 3) \times 2 - 10x - 10$$

$$D = -10x \times 2 - 3 \times 2 - 10x - 10$$

$$D = -10 \times x \times 2 - 6 - 10x - 10$$

$$D = -10 \times 2 \times x - 10x - 6 - 10$$

$$D = -20x - 10x - 6 - 10$$

$$D = (-20 - 10)x - 16$$

$$D = -30x - 16$$

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

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

$$E = 3 - 3 \times x \times 3 - 24$$

$$E = 3 - 3 \times 3 \times x - 24$$

$$E = 3 - 9x - 24$$

$$E = -9x + 3 - 24$$

$$E = -9x - 21$$