

**Corrigé de l'exercice 1**

Développer et réduire chacune des expressions littérales suivantes :

$$A = 6 \times 4x$$

$$A = 6 \times 4 \times x$$

$A = 24x$

$$B = 2x \times 9$$

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

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

$B = 18x$

$$C = (5x + 10) \times 10 + 4x$$

$$C = 5x \times 10 + 10 \times 10 + 4x$$

$$C = 5 \times x \times 10 + 100 + 4x$$

$$C = 5 \times 10 \times x + 4x + 100$$

$$C = 50x + 4x + 100$$

$$C = (50 + 4)x + 100$$

$C = 54x + 100$

$$D = (-7x - 4) \times 3 - 7x - 7$$

$$D = -7x \times 3 - 4 \times 3 - 7x - 7$$

$$D = -7 \times x \times 3 - 12 - 7x - 7$$

$$D = -7 \times 3 \times x - 7x - 12 - 7$$

$$D = -21x - 7x - 12 - 7$$

$$D = (-21 - 7)x - 19$$

$D = -28x - 19$

$$E = 4 + 6 \times (2x + 9)$$

$$E = 4 + 6 \times 2x + 6 \times 9$$

$$E = 4 + 6 \times 2 \times x + 54$$

$$E = 4 + 12x + 54$$

$$E = 12x + 4 + 54$$

$E = 12x + 58$

**Corrigé de l'exercice 2**

Développer et réduire chacune des expressions littérales suivantes :

$$A = 2x \times 8$$

$$A = 2 \times x \times 8$$

$$A = 2 \times 8 \times x$$

$A = 16x$

$$B = 2x \times 8$$

$$B = 2 \times x \times 8$$

$$B = 2 \times 8 \times x$$

$B = 16x$

$$C = -6x + 3 + 3 \times (x + 7)$$

$$C = -6x + 3 + 3 \times x + 3 \times 7$$

$$C = -6x + 3 + 3x + 21$$

$$C = -6x + 3x + 3 + 21$$

$$C = (-6 + 3)x + 24$$

$C = -3x + 24$

$$D = 6 + (-5x - 7) \times 7$$

$$D = 6 - 5x \times 7 - 7 \times 7$$

$$D = 6 - 5 \times x \times 7 - 49$$

$$D = 6 - 5 \times 7 \times x - 49$$

$$D = 6 - 35x - 49$$

$$D = -35x + 6 - 49$$

$D = -35x - 43$

$$E = 8x + 5 \times (5x + 4)$$

$$E = 8x + 5 \times 5x + 5 \times 4$$

$$E = 8x + 5 \times 5 \times x + 20$$

$$E = 8x + 25x + 20$$

$$E = (8 + 25)x + 20$$

$E = 33x + 20$

**Corrigé de l'exercice 3**

Développer et réduire chacune des expressions littérales suivantes :

$$A = 7 \times 9x$$

$$A = 7 \times 9 \times x$$

$A = 63x$

$$B = 3 \times 4x$$

$$B = 3 \times 4 \times x$$

$B = 12x$

$$C = (-9x + 3) \times 8 + 7x - 4$$

$$C = -9x \times 8 + 3 \times 8 + 7x - 4$$

$$C = -9 \times x \times 8 + 24 + 7x - 4$$

$$C = -9 \times 8 \times x + 7x + 24 - 4$$

$$C = -72x + 7x + 24 - 4$$

$$C = (-72 + 7)x + 20$$

$$C = -65x + 20$$

$$\begin{aligned} D &= 3x + (5x + 8) \times 8 \\ D &= 3x + 5x \times 8 + 8 \times 8 \\ D &= 3x + 5 \times x \times 8 + 64 \\ D &= 3x + 5 \times 8 \times x + 64 \\ D &= 3x + 40x + 64 \\ D &= (3 + 40)x + 64 \\ D &= 43x + 64 \end{aligned}$$

$$\begin{aligned} E &= 3 + (-3x + 5) \times 4 \\ E &= 3 - 3x \times 4 + 5 \times 4 \\ E &= 3 - 3 \times x \times 4 + 20 \\ E &= 3 - 3 \times 4 \times x + 20 \\ E &= 3 - 12x + 20 \\ E &= -12x + 3 + 20 \\ E &= -12x + 23 \end{aligned}$$

### Corrigé de l'exercice 4

Développer et réduire chacune des expressions littérales suivantes :

$$\begin{aligned} A &= 9 \times 8x \\ A &= 9 \times 8 \times x \\ A &= 72x \end{aligned}$$

$$\begin{aligned} B &= 4x \times 2 \\ B &= 4 \times x \times 2 \\ B &= 4 \times 2 \times x \\ B &= 8x \end{aligned}$$

$$\begin{aligned} C &= 8 \times (-2x + 1) - 7 \\ C &= 8 \times (-2x) + 8 \times 1 - 7 \\ C &= 8 \times (-2) \times x + 8 - 7 \\ C &= -16x + 1 \end{aligned}$$

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

$$\begin{aligned} D &= 6x + 6 \times 8x + 6 \times (-6) \\ D &= 6x + 6 \times 8 \times x - 36 \\ D &= 6x + 48x - 36 \\ D &= (6 + 48)x - 36 \\ D &= 54x - 36 \end{aligned}$$

$$\begin{aligned} E &= (10x + 8) \times 3 - 7x + 7 \\ E &= 10x \times 3 + 8 \times 3 - 7x + 7 \\ E &= 10 \times x \times 3 + 24 - 7x + 7 \\ E &= 10 \times 3 \times x - 7x + 24 + 7 \\ E &= 30x - 7x + 24 + 7 \\ E &= (30 - 7)x + 31 \\ E &= 23x + 31 \end{aligned}$$

### Corrigé de l'exercice 5

Développer et réduire chacune des expressions littérales suivantes :

$$\begin{aligned} A &= 7 \times 2x \\ A &= 7 \times 2 \times x \\ A &= 14x \end{aligned}$$

$$\begin{aligned} B &= 2x \times 8 \\ B &= 2 \times x \times 8 \\ B &= 2 \times 8 \times x \\ B &= 16x \end{aligned}$$

$$\begin{aligned} C &= 9x + 6 \times (8x - 7) \\ C &= 9x + 6 \times 8x + 6 \times (-7) \\ C &= 9x + 6 \times 8 \times x - 42 \\ C &= 9x + 48x - 42 \\ C &= (9 + 48)x - 42 \\ C &= 57x - 42 \end{aligned}$$

$$\begin{aligned} D &= 7x + 7 + 10 \times (5x - 4) \\ D &= 7x + 7 + 10 \times 5x + 10 \times (-4) \\ D &= 7x + 7 + 10 \times 5 \times x - 40 \\ D &= 7x + 7 + 50x - 40 \\ D &= 7x + 50x + 7 - 40 \\ D &= (7 + 50)x - 33 \\ D &= 57x - 33 \end{aligned}$$

$$\begin{aligned} E &= -1 + 10 \times (-x - 5) \\ E &= -1 + 10 \times (-x) + 10 \times (-5) \\ E &= -1 + 10 \times (-1) \times x - 50 \\ E &= -1 - 10x - 50 \\ E &= -10x - 1 - 50 \\ E &= -10x - 51 \end{aligned}$$