

**Corrigé de l'exercice 1**

Développer et réduire chacune des expressions littérales suivantes :

$$A = 2 \times 4x$$

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

$A = 8x$

$$B = 3 \times 2x$$

$$B = 3 \times 2 \times x$$

$B = 6x$

$$C = 5 + (x - 6) \times 6$$

$$C = 5 + x \times 6 - 6 \times 6$$

$$C = 5 + 6 \times x - 36$$

$$C = 5 + 6x - 36$$

$$C = 6x + 5 - 36$$

$C = 6x - 31$

$$D = 9 \times (6x - 5) + 10x$$

$$D = 9 \times 6x + 9 \times (-5) + 10x$$

$$D = 9 \times 6 \times x - 45 + 10x$$

$$D = 54x + 10x - 45$$

$$D = (54 + 10)x - 45$$

$D = 64x - 45$

$$E = (-7x - 1) \times 10 + 10x + 2$$

$$E = -7x \times 10 - 1 \times 10 + 10x + 2$$

$$E = -7 \times x \times 10 - 10 + 10x + 2$$

$$E = -7 \times 10 \times x + 10x - 10 + 2$$

$$E = -70x + 10x - 10 + 2$$

$$E = (-70 + 10)x - 8$$

$E = -60x - 8$

**Corrigé de l'exercice 2**

Développer et réduire chacune des expressions littérales suivantes :

$$A = 8 \times 9x$$

$$A = 8 \times 9 \times x$$

$A = 72x$

$$B = 7 \times 7x$$

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

$B = 49x$

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

$$D = 2 - 2x \times 7 - 4 \times 7$$

$$D = 2 - 2 \times x \times 7 - 28$$

$$D = 2 - 2 \times 7 \times x - 28$$

$$D = 2 - 14x - 28$$

$$D = -14x + 2 - 28$$

$D = -14x - 26$

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

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

$$C = 6 \times 7 \times x - 30 + 7x$$

$$C = 42x + 7x - 30$$

$$C = (42 + 7)x - 30$$

$C = 49x - 30$

$$E = -2x + 4 + (x - 5) \times 9$$

$$E = -2x + 4 + x \times 9 - 5 \times 9$$

$$E = -2x + 4 + 9 \times x - 45$$

$$E = -2x + 4 + 9x - 45$$

$$E = -2x + 9x + 4 - 45$$

$$E = (-2 + 9)x - 41$$

$E = 7x - 41$

**Corrigé de l'exercice 3**

Développer et réduire chacune des expressions littérales suivantes :

$$A = 9x \times 9$$

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

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

$A = 81x$

$$B = 2 \times 9x$$

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

$B = 18x$

$$C = (3x + 4) \times 9 - 9x + 6$$

$$C = 3x \times 9 + 4 \times 9 - 9x + 6$$

$$C = 3 \times x \times 9 + 36 - 9x + 6$$

$$C = 3 \times 9 \times x - 9x + 36 + 6$$

$$C = 27x - 9x + 36 + 6$$

$$C = (27 - 9)x + 42$$

$C = 18x + 42$

$$\begin{aligned}D &= 5 \times (-x + 9) + 9 \\D &= 5 \times (-x) + 5 \times 9 + 9 \\D &= 5 \times (-1) \times x + 45 + 9 \\D &= -5x + 54\end{aligned}$$

$$E = 9 \times (10x + 2) - 8x$$

$$\begin{aligned}E &= 9 \times 10x + 9 \times 2 - 8x \\E &= 9 \times 10 \times x + 18 - 8x \\E &= 90x - 8x + 18 \\E &= (90 - 8)x + 18 \\E &= 82x + 18\end{aligned}$$

### Corrigé de l'exercice 4

Développer et réduire chacune des expressions littérales suivantes :

$$\begin{aligned}A &= 3x \times 5 \\A &= 3 \times x \times 5 \\A &= 3 \times 5 \times x \\A &= 15x\end{aligned}$$

$$\begin{aligned}B &= 5x \times 7 \\B &= 5 \times x \times 7 \\B &= 5 \times 7 \times x \\B &= 35x\end{aligned}$$

$$\begin{aligned}C &= 1 + (5x + 3) \times 2 \\C &= 1 + 5x \times 2 + 3 \times 2 \\C &= 1 + 5 \times x \times 2 + 6 \\C &= 1 + 5 \times 2 \times x + 6 \\C &= 1 + 10x + 6 \\C &= 10x + 1 + 6 \\C &= 10x + 7\end{aligned}$$

$$\begin{aligned}D &= 2 \times (8x + 5) - 8x \\D &= 2 \times 8x + 2 \times 5 - 8x \\D &= 2 \times 8 \times x + 10 - 8x \\D &= 16x - 8x + 10 \\D &= (16 - 8)x + 10 \\D &= 8x + 10\end{aligned}$$

$$\begin{aligned}E &= -4x + 3 + (3x - 10) \times 9 \\E &= -4x + 3 + 3x \times 9 - 10 \times 9 \\E &= -4x + 3 + 3 \times x \times 9 - 90 \\E &= -4x + 3 + 3 \times 9 \times x - 90 \\E &= -4x + 3 + 27x - 90 \\E &= -4x + 27x + 3 - 90 \\E &= (-4 + 27)x - 87 \\E &= 23x - 87\end{aligned}$$

### Corrigé de l'exercice 5

Développer et réduire chacune des expressions littérales suivantes :

$$\begin{aligned}A &= 9 \times 7x \\A &= 9 \times 7 \times x \\A &= 63x\end{aligned}$$

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

$$C = 17x + 18$$

$$\begin{aligned}D &= 2 \times (5x - 3) + 9x - 5 \\D &= 2 \times 5x + 2 \times (-3) + 9x - 5 \\D &= 2 \times 5 \times x - 6 + 9x - 5 \\D &= 10x + 9x - 6 - 5 \\D &= (10 + 9)x - 11 \\D &= 19x - 11\end{aligned}$$

$$\begin{aligned}C &= -3x + (10x + 9) \times 2 \\C &= -3x + 10x \times 2 + 9 \times 2 \\C &= -3x + 10 \times x \times 2 + 18 \\C &= -3x + 10 \times 2 \times x + 18 \\C &= -3x + 20x + 18 \\C &= (-3 + 20)x + 18\end{aligned}$$

$$\begin{aligned}E &= (4x + 3) \times 5 + 5 \\E &= 4x \times 5 + 3 \times 5 + 5 \\E &= 4 \times x \times 5 + 15 + 5 \\E &= 4 \times 5 \times x + 20 \\E &= 20x + 20\end{aligned}$$

### Corrigé de l'exercice 6

Développer et réduire chacune des expressions littérales suivantes :

$$A = 3x \times 4$$

$$A = 3 \times x \times 4$$

$$A = 3 \times 4 \times x$$

$$\boxed{A = 12x}$$

$$B = 5x \times 6$$

$$B = 5 \times x \times 6$$

$$B = 5 \times 6 \times x$$

$$\boxed{B = 30x}$$

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

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

$$C = 9 \times (-10) \times x - 54 + 8x$$

$$C = -90x + 8x - 54$$

$$C = (-90 + 8)x - 54$$

$$\boxed{C = -82x - 54}$$

$$D = 6 + (4x - 1) \times 8$$

$$D = 6 + 4x \times 8 - 1 \times 8$$

$$D = 6 + 4 \times x \times 8 - 8$$

$$D = 6 + 4 \times 8 \times x - 8$$

$$D = 6 + 32x - 8$$

$$\boxed{D = 32x + 6 - 8}$$

$$\boxed{D = 32x - 2}$$

$$E = 8 \times (5x + 9) - 3x - 2$$

$$E = 8 \times 5x + 8 \times 9 - 3x - 2$$

$$E = 8 \times 5 \times x + 72 - 3x - 2$$

$$E = 40x - 3x + 72 - 2$$

$$E = (40 - 3)x + 70$$

$$\boxed{E = 37x + 70}$$