

Exercice 1

Réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 3x + 9 - (-7x - 7) \\ B = -10 - (-5x - 10) - 5x \\ C = (-9x + 5) + 9 + 10x \end{array}$$

$$\begin{array}{l} D = -3x - (5x + 9) + 3 \\ E = (-x + 7) - 9x + 9 \\ F = -10 - (-3x - 8) - 10x \end{array}$$

Exercice 2

Réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 3x + 5 + (2x - 2) \\ B = 10 - (3x + 6) + 3x \\ C = -(4x + 8) - 4x - 8 \end{array}$$

$$\begin{array}{l} D = (-2x + 2) - 3 - 9x \\ E = -(5x - 6) + 9x - 5 \\ F = -10x - (-2x + 9) - 8 \end{array}$$

Exercice 3

Réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 10x - 2 - (10x + 4) \\ B = (10x - 1) + 5 - 5x \\ C = -3 + 5x + (2x - 3) \end{array}$$

$$\begin{array}{l} D = -2 + 10x - (x + 7) \\ E = -(8x - 10) - 4 - 10x \\ F = -9 - (-9x + 9) + 9x \end{array}$$

Exercice 4

Réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = 6 - 2x - (-9x - 2) \\ B = -8x - 10 + (6x + 9) \\ C = -9 - 3x - (2x - 7) \end{array}$$

$$\begin{array}{l} D = -(3x - 8) - 4x + 5 \\ E = -(7x - 6) - 7x - 5 \\ F = (5x - 2) - 6x + 10 \end{array}$$

Exercice 5

Réduire chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (-9x - 2) - 6 + 2x \\ B = 7x - 10 - (x + 1) \\ C = -9x + (-3x + 10) - 4 \end{array}$$

$$\begin{array}{l} D = 9x - 10 - (x + 9) \\ E = -10x - (-9x + 4) - 5 \\ F = -(-x - 6) + 6x + 5 \end{array}$$

Corrigé de l'exercice 1

Réduire chacune des expressions littérales suivantes :

$$A = 3x + 9 - (-7x - 7)$$

$$A = 3x + 9 + 7x + 7$$

$$A = 3x + 7x + 9 + 7$$

$$A = (3 + 7)x + 16$$

$$\boxed{A = 10x + 16}$$

$$B = -10 - (-5x - 10) - 5x$$

$$B = -10 + 5x + 10 - 5x$$

$$B = 5x - 5x - 10 + 10$$

$$B = (5 - 5)x$$

$$\boxed{B = 0}$$

$$C = (-9x + 5) + 9 + 10x$$

$$C = -9x + 5 + 10x + 9$$

$$C = -9x + 10x + 5 + 9$$

$$C = (-9 + 10)x + 14$$

$$\boxed{C = x + 14}$$

$$D = -3x - (5x + 9) + 3$$

$$D = -3x - 5x - 9 + 3$$

$$D = (-3 - 5)x - 6$$

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

$$E = (-x + 7) - 9x + 9$$

$$E = -x + 7 - 9x + 9$$

$$E = -x - 9x + 7 + 9$$

$$E = (-1 - 9)x + 16$$

$$\boxed{E = -10x + 16}$$

$$F = -10 - (-3x - 8) - 10x$$

$$F = -10 + 3x + 8 - 10x$$

$$F = 3x - 10x - 10 + 8$$

$$F = (3 - 10)x - 2$$

$$\boxed{F = -7x - 2}$$

Corrigé de l'exercice 2

Réduire chacune des expressions littérales suivantes :

$$A = 3x + 5 + (2x - 2)$$

$$A = 3x + 5 + 2x - 2$$

$$A = 3x + 2x + 5 - 2$$

$$A = (3 + 2)x + 3$$

$$\boxed{A = 5x + 3}$$

$$B = 10 - (3x + 6) + 3x$$

$$B = 10 - 3x - 6 + 3x$$

$$B = -3x + 3x + 10 - 6$$

$$B = (-3 + 3)x + 4$$

$$\boxed{B = 4}$$

$$C = -(4x + 8) - 4x - 8$$

$$C = -4x - 8 - 4x - 8$$

$$C = -4x - 4x - 8 - 8$$

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

$$\boxed{C = -8x - 16}$$

$$D = (-2x + 2) - 3 - 9x$$

$$D = -2x + 2 - 9x - 3$$

$$D = -2x - 9x + 2 - 3$$

$$D = (-2 - 9)x - 1$$

$$\boxed{D = -11x - 1}$$

$$E = -(5x - 6) + 9x - 5$$

$$E = -5x + 6 + 9x - 5$$

$$E = -5x + 9x + 6 - 5$$

$$E = (-5 + 9)x + 1$$

$$\boxed{E = 4x + 1}$$

$$F = -10x - (-2x + 9) - 8$$

$$F = -10x + 2x - 9 - 8$$

$$F = (-10 + 2)x - 17$$

$$\boxed{F = -8x - 17}$$

Corrigé de l'exercice 3

Réduire chacune des expressions littérales suivantes :

$$A = 10x - 2 - (10x + 4)$$

$$A = 10x - 2 - 10x - 4$$

$$A = 10x - 10x - 2 - 4$$

$$A = (10 - 10)x - 6$$

$$\boxed{A = -6}$$

$$\begin{aligned}B &= (10x - 1) + 5 - 5x \\B &= 10x - 1 - 5x + 5 \\B &= 10x - 5x - 1 + 5 \\B &= (10 - 5)x + 4 \\B &= 5x + 4\end{aligned}$$

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

$$\begin{aligned}D &= -2 + 10x - (x + 7) \\D &= 10x - 2 - (x + 7) \\D &= 10x - 2 - x - 7 \\D &= 10x - x - 2 - 7\end{aligned}$$

$$\begin{aligned}D &= (10 - 1)x - 9 \\D &= 9x - 9\end{aligned}$$

$$\begin{aligned}E &= -(8x - 10) - 4 - 10x \\E &= -8x + 10 - 4 - 10x \\E &= -8x - 10x + 10 - 4 \\E &= (-8 - 10)x + 6 \\E &= -18x + 6\end{aligned}$$

$$\begin{aligned}F &= -9 - (-9x + 9) + 9x \\F &= -9 + 9x - 9 + 9x \\F &= 9x + 9x - 9 - 9 \\F &= (9 + 9)x - 18 \\F &= 18x - 18\end{aligned}$$

Corrigé de l'exercice 4

Réduire chacune des expressions littérales suivantes :

$$\begin{aligned}A &= 6 - 2x - (-9x - 2) \\A &= -2x + 6 - (-9x - 2) \\A &= -2x + 6 + 9x + 2 \\A &= -2x + 9x + 6 + 2 \\A &= (-2 + 9)x + 8 \\A &= 7x + 8\end{aligned}$$

$$\begin{aligned}B &= -8x - 10 + (6x + 9) \\B &= -8x - 10 + 6x + 9 \\B &= -8x + 6x - 10 + 9 \\B &= (-8 + 6)x - 1 \\B &= -2x - 1\end{aligned}$$

$$\begin{aligned}C &= -9 - 3x - (2x - 7) \\C &= -3x - 9 - (2x - 7) \\C &= -3x - 9 - 2x + 7 \\C &= -3x - 2x - 9 + 7 \\C &= (-3 - 2)x - 2 \\C &= -5x - 2\end{aligned}$$

$$\begin{aligned}D &= -(3x - 8) - 4x + 5 \\D &= -3x + 8 - 4x + 5 \\D &= -3x - 4x + 8 + 5 \\D &= (-3 - 4)x + 13 \\D &= -7x + 13\end{aligned}$$

$$\begin{aligned}E &= -(7x - 6) - 7x - 5 \\E &= -7x + 6 - 7x - 5 \\E &= -7x - 7x + 6 - 5 \\E &= (-7 - 7)x + 1 \\E &= -14x + 1\end{aligned}$$

$$\begin{aligned}F &= (5x - 2) - 6x + 10 \\F &= 5x - 2 - 6x + 10 \\F &= 5x - 6x - 2 + 10 \\F &= (5 - 6)x + 8 \\F &= -x + 8\end{aligned}$$

Corrigé de l'exercice 5

Réduire chacune des expressions littérales suivantes :

$$\begin{aligned}A &= (-9x - 2) - 6 + 2x \\A &= -9x - 2 + 2x - 6 \\A &= -9x + 2x - 2 - 6 \\A &= (-9 + 2)x - 8 \\A &= -7x - 8\end{aligned}$$

$$B = 7x - 10 - (x + 1)$$

$$\begin{aligned}B &= 7x - 10 - x - 1 \\B &= 7x - x - 10 - 1 \\B &= (7 - 1)x - 11 \\B &= 6x - 11\end{aligned}$$

$$\begin{aligned}C &= -9x + (-3x + 10) - 4 \\C &= -9x - 3x + 10 - 4\end{aligned}$$

$$C = (-9 - 3) x + 6$$

$$\boxed{C = -12x + 6}$$

$$D = 9x - 10 - (x + 9)$$

$$D = 9x - 10 - x - 9$$

$$D = 9x - x - 10 - 9$$

$$D = (9 - 1)x - 19$$

$$\boxed{D = 8x - 19}$$

$$E = -10x - (-9x + 4) - 5$$

$$E = -10x + 9x - 4 - 5$$

$$E = (-10 + 9)x - 9$$

$$\boxed{E = -x - 9}$$

$$F = -(-x - 6) + 6x + 5$$

$$F = x + 6 + 6x + 5$$

$$F = x + 6x + 6 + 5$$

$$F = (1 + 6)x + 11$$

$$\boxed{F = 7x + 11}$$