

Corrigé de l'exercice 1

Réduire chacune des expressions littérales suivantes :

$$A = -6x - (-7x - 9) + 5$$

$$A = -6x + 7x + 9 + 5$$

$$A = (-6 + 7)x + 14$$

$$A = x + 14$$

$$B = (8x - 7) + 3 + 2x$$

$$B = 8x - 7 + 2x + 3$$

$$B = 8x + 2x - 7 + 3$$

$$B = (8 + 2)x - 4$$

$$B = 10x - 4$$

$$C = -(-4x + 1) - 9x + 9$$

$$C = 4x - 1 - 9x + 9$$

$$C = 4x - 9x - 1 + 9$$

$$C = (4 - 9)x + 8$$

$$C = -5x + 8$$

$$D = 5 - 2x - (-4x - 9)$$

$$D = -2x + 5 - (-4x - 9)$$

$$D = -2x + 5 + 4x + 9$$

$$D = -2x + 4x + 5 + 9$$

$$D = (-2 + 4)x + 14$$

$$D = 2x + 14$$

$$E = 2 + (6x + 3) + 2x$$

$$E = 2 + 6x + 3 + 2x$$

$$E = 6x + 2x + 2 + 3$$

$$E = (6 + 2)x + 5$$

$$E = 8x + 5$$

$$F = -(x - 6) - 7 - 10x$$

$$F = -x + 6 - 7 - 10x$$

$$F = -x - 10x + 6 - 7$$

$$F = (-1 - 10)x - 1$$

$$F = -11x - 1$$

Corrigé de l'exercice 2

Réduire chacune des expressions littérales suivantes :

$$A = 2x + 5 - (4x + 1)$$

$$A = 2x + 5 - 4x - 1$$

$$A = 2x - 4x + 5 - 1$$

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

$$A = -2x + 4$$

$$B = -10 + (4x + 9) + 4x$$

$$B = -10 + 4x + 9 + 4x$$

$$B = 4x + 4x - 10 + 9$$

$$B = (4 + 4)x - 1$$

$$B = 8x - 1$$

$$C = -(10x + 2) + 3 - 10x$$

$$C = -10x - 2 + 3 - 10x$$

$$C = -10x - 10x - 2 + 3$$

$$C = (-10 - 10)x + 1$$

$$C = -20x + 1$$

$$D = -10x + (-x - 9) + 6$$

$$D = -10x - x - 9 + 6$$

$$D = (-10 - 1)x - 3$$

$$D = -11x - 3$$

$$E = -7 + 9x - (-2x - 1)$$

$$E = 9x - 7 - (-2x - 1)$$

$$E = 9x - 7 + 2x + 1$$

$$E = 9x + 2x - 7 + 1$$

$$E = (9 + 2)x - 6$$

$$E = 11x - 6$$

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

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

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

$$F = (-10 - 8)x - 5$$

$$F = -18x - 5$$

Corrigé de l'exercice 3

Réduire chacune des expressions littérales suivantes :

$$A = (3x - 7) + 8 + 9x$$

$$A = 3x - 7 + 9x + 8$$

$$A = 3x + 9x - 7 + 8$$

$$A = (3 + 9)x + 1$$

$$A = 12x + 1$$

$$\begin{aligned} B &= 6x - 6 - (4x - 7) \\ B &= 6x - 6 - 4x + 7 \\ B &= 6x - 4x - 6 + 7 \\ B &= (6 - 4)x + 1 \\ B &= 2x + 1 \end{aligned}$$

$$\begin{aligned} C &= 4 - (-5x - 2) - 3x \\ C &= 4 + 5x + 2 - 3x \\ C &= 5x - 3x + 4 + 2 \\ C &= (5 - 3)x + 6 \\ C &= 2x + 6 \end{aligned}$$

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

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

$$\begin{aligned} E &= 10x - (7x - 5) - 4 \\ E &= 10x - 7x + 5 - 4 \\ E &= (10 - 7)x + 1 \\ E &= 3x + 1 \end{aligned}$$

$$\begin{aligned} F &= (10x - 9) - 2 - 9x \\ F &= 10x - 9 - 9x - 2 \\ F &= 10x - 9x - 9 - 2 \\ F &= (10 - 9)x - 11 \\ F &= x - 11 \end{aligned}$$

Corrigé de l'exercice 4

Réduire chacune des expressions littérales suivantes :

$$\begin{aligned} A &= (-2x - 7) - 9x + 4 \\ A &= -2x - 7 - 9x + 4 \\ A &= -2x - 9x - 7 + 4 \\ A &= (-2 - 9)x - 3 \\ A &= -11x - 3 \end{aligned}$$

$$\begin{aligned} B &= -(x - 4) + 9 - 4x \\ B &= -x + 4 + 9 - 4x \\ B &= -x - 4x + 4 + 9 \\ B &= (-1 - 4)x + 13 \\ B &= -5x + 13 \end{aligned}$$

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

$$\begin{aligned} D &= -(-3x - 4) + 10x - 9 \\ D &= 3x + 4 + 10x - 9 \\ D &= 3x + 10x + 4 - 9 \\ D &= (3 + 10)x - 5 \\ D &= 13x - 5 \end{aligned}$$

$$\begin{aligned} E &= (7x - 10) - 2x - 3 \\ E &= 7x - 10 - 2x - 3 \\ E &= 7x - 2x - 10 - 3 \\ E &= (7 - 2)x - 13 \\ E &= 5x - 13 \end{aligned}$$

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

Corrigé de l'exercice 5

Réduire chacune des expressions littérales suivantes :

$$\begin{aligned} A &= -(8x + 1) + 9 - 7x \\ A &= -8x - 1 + 9 - 7x \\ A &= -8x - 7x - 1 + 9 \\ A &= (-8 - 7)x + 8 \\ A &= -15x + 8 \end{aligned}$$

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

$$\begin{aligned} B &= (9 + 9)x + 13 \\ B &= 18x + 13 \end{aligned}$$

$$\begin{aligned} C &= 8x + 7 - (10x + 3) \\ C &= 8x + 7 - 10x - 3 \\ C &= 8x - 10x + 7 - 3 \\ C &= (8 - 10)x + 4 \\ C &= -2x + 4 \end{aligned}$$

$$\begin{aligned} D &= -(-2x + 5) - 2x + 8 \\ D &= 2x - 5 - 2x + 8 \\ D &= 2x - 2x - 5 + 8 \\ D &= (2 - 2)x + 3 \\ \boxed{D = 3} \end{aligned}$$

$$\begin{aligned} E &= (6x - 3) + 2x - 8 \\ E &= 6x - 3 + 2x - 8 \\ E &= 6x + 2x - 3 - 8 \end{aligned}$$

$$\begin{aligned} E &= (6 + 2)x - 11 \\ \boxed{E = 8x - 11} \end{aligned}$$

$$\begin{aligned} F &= 3x + 3 + (-8x + 8) \\ F &= 3x + 3 - 8x + 8 \\ F &= 3x - 8x + 3 + 8 \\ F &= (3 - 8)x + 11 \\ \boxed{F = -5x + 11} \end{aligned}$$

Corrigé de l'exercice 6

Réduire chacune des expressions littérales suivantes :

$$\begin{aligned} A &= -(-4x + 4) - 4 - 6x \\ A &= 4x - 4 - 4 - 6x \\ A &= 4x - 6x - 4 - 4 \\ A &= (4 - 6)x - 8 \\ \boxed{A = -2x - 8} \end{aligned}$$

$$\begin{aligned} B &= -(4x - 7) - 5 + 7x \\ B &= -4x + 7 - 5 + 7x \\ B &= -4x + 7x + 7 - 5 \\ B &= (-4 + 7)x + 2 \\ \boxed{B = 3x + 2} \end{aligned}$$

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

$$D = 5 - 8x - (-8x - 1)$$

$$\begin{aligned} D &= -8x + 5 - (-8x - 1) \\ D &= -8x + 5 + 8x + 1 \\ D &= -8x + 8x + 5 + 1 \\ D &= (-8 + 8)x + 6 \\ \boxed{D = 6} \end{aligned}$$

$$\begin{aligned} E &= (-4x + 3) - 4x + 4 \\ E &= -4x + 3 - 4x + 4 \\ E &= -4x - 4x + 3 + 4 \\ E &= (-4 - 4)x + 7 \\ \boxed{E = -8x + 7} \end{aligned}$$

$$\begin{aligned} F &= -(-9x + 4) - 10x - 5 \\ F &= 9x - 4 - 10x - 5 \\ F &= 9x - 10x - 4 - 5 \\ F &= (9 - 10)x - 9 \\ \boxed{F = -x - 9} \end{aligned}$$