



Réduire une expression avec parenthèses

Exercice n°1 : Réduire les expressions suivantes.

$$3b + (8b - 6) =$$

$$-5z - (-6 + 2z) =$$

$$4y - (-8 - 4y) =$$

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

$$6z - (6 + 2z) =$$

$$5a - (-7 + 4a) =$$

$$-7c + (-9 + 8c) =$$

$$6b + (5 + 8b) =$$

$$2z - (3 - 8z) =$$

$$3y - (-4 - 2y) =$$

Exercice n°2 : Réduire les expressions suivantes.

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

$$B = 9x + (6x + 1) - 10$$

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

$$D = 6x - 8 - (-2x - 2)$$

$$E = (x - 8) - 8x - 2$$

$$F = (-6x + 8) - 2x + 4$$

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

$$H = -3x + (-3x + 9) - 3$$

$$I = 4 - (-2x + 6) - 5x$$

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

Exercice n°3 : Réduire les expressions suivantes.

$$(-2x - 8) - (-6x - 2) =$$

$$(-3b + 4) - (-2b + 8) =$$

$$-(9a - 1) + (-6a + 3) =$$

$$-(3z + 2) - (9z + 5) =$$

$$(z - 4) + (8z + 4) =$$

$$(-7y + 4) - (6y + 1) =$$

$$-(2c - 3) + (-8c + 4) =$$

$$(8z - 5) - (-4z + 7) =$$

$$-(-6a + 5) - (6a - 8) =$$

$$(6c - 6) - (8c + 2) =$$

Exercice n°4 : Réduire les expressions suivantes.

$$A = (x + 1) - (x + 4) - (x - 6)$$

$$B = -(2x^2 - 3x) - (x - 2) - (5 - 4x^2)$$

$$C = 4x^2 - (6x^2 - 10x^2) + (2x^2 + 7x) - 5$$

$$D = -2x + x^2 - (7 + 4x^2) + 3x - (10 - 7x) + 4x^2$$

$$E = -(4 + 2x - x^2) - (4x - x^2) + (x - x^2)$$

$$F = 2x^2 + 3 - (6x^2 - x + 3x^3 - 5x) - (-3x^3 + 9x)$$



Correction

Exercice n°1 : Réduire les expressions suivantes.

$$\begin{aligned}3b + (8b - 6) &= 3b + 8b - 6 \\ &= 11b - 6\end{aligned}$$

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

$$\begin{aligned}4y - (-8 - 4y) &= 4y + 8 + 4y \\ &= 8y + 8\end{aligned}$$

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

$$\begin{aligned}6z - (6 + 2z) &= 6z - 6 - 2z \\ &= 4z - 6\end{aligned}$$

$$\begin{aligned}5a - (-7 + 4a) &= 5a + 7 - 4a \\ &= a + 7\end{aligned}$$

$$\begin{aligned}-7c + (-9 + 8c) &= -7c - 9 + 8c \\ &= c - 9\end{aligned}$$

$$\begin{aligned}6b + (5 + 8b) &= 6b + 5 + 8b \\ &= 14b + 5\end{aligned}$$

$$\begin{aligned}2z - (3 - 8z) &= 2z - 3 + 8z \\ &= 10z - 3\end{aligned}$$

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

Exercice n°2 : Réduire les expressions suivantes.

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

$$\begin{aligned}B &= 9x + (6x + 1) - 10 \\ B &= 9x + 6x + 1 - 10 \\ B &= 15x - 9\end{aligned}$$

$$\begin{aligned}C &= -3x - (-6x - 9) + 9 \\ C &= -3x + 6x + 9 + 9 \\ C &= 3x + 18\end{aligned}$$

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

$$\begin{aligned}E &= (x - 8) - 8x - 2 \\ E &= x - 8 - 8x - 2 \\ E &= x - 8x - 8 - 2 \\ E &= -7x - 10\end{aligned}$$

$$\begin{aligned}F &= (-6x + 8) - 2x + 4 \\ F &= -6x + 8 - 2x + 4 \\ F &= -6x - 2x + 8 + 4 \\ F &= -8x + 12\end{aligned}$$

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

$$\begin{aligned}H &= -3x + (-3x + 9) - 3 \\ H &= -3x - 3x + 9 - 3 \\ H &= -6x + 6\end{aligned}$$

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

$$\begin{aligned}J &= 6 + 9x - (x - 10) \\ J &= 9x + 6 - x + 10 \\ J &= 9x - x + 6 + 10 \\ J &= 8x + 16\end{aligned}$$

Exercice n°3 : Réduire les expressions suivantes.

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

$$\begin{aligned}(-3b + 4) - (-2b + 8) &= -3b + 4 + 2b - 8 \\ &= -b - 4\end{aligned}$$

$$\begin{aligned}-(9a - 1) + (-6a + 3) &= -9a + 1 - 6a + 3 \\ &= -15a + 4\end{aligned}$$

$$\begin{aligned}(-7y + 4) - (6y + 1) &= -7y + 4 - 6y - 1 \\ &= -13y + 3\end{aligned}$$

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

$$\begin{aligned}(8z - 5) - (-4z + 7) &= 8z - 5 + 4z - 7 \\ &= 12z - 12\end{aligned}$$

$$\begin{aligned} -(3z + 2) - (9z + 5) &= -3z - 2 - 9z - 5 \\ &= -12z - 7 \end{aligned}$$

$$\begin{aligned} (z - 4) + (8z + 4) &= z - 4 + 8z + 4 \\ &= 9z \end{aligned}$$

$$\begin{aligned} -(-6a + 5) - (6a - 8) &= 6a - 5 - 6a + 8 \\ &= 3 \end{aligned}$$

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

Exercice n°4 : Réduire les expressions suivantes.

$$A = (x + 1) - (x + 4) - (x - 6)$$

$$A = x + 1 - x - 4 - x + 6$$

$$A = -x + 3$$

$$B = -(2x^2 - 3x) - (x - 2) - (5 - 4x^2)$$

$$B = -2x^2 + 3x - x + 2 - 5 + 4x^2$$

$$B = 2x^2 + 2x - 3$$

$$C = 4x^2 - (6x^2 - 10x^2) + (2x^2 + 7x) - 5$$

$$C = 4x^2 - 6x^2 + 10x^2 + 2x^2 + 7x - 5$$

$$C = 10x^2 + 7x - 5$$

$$D = -2x + x^2 - (7 + 4x^2) + 3x - (10 - 7x) + 4x^2$$

$$D = -2x + x^2 - 7 - 4x^2 + 3x - 10 + 7x + 4x^2$$

$$D = x^2 + 8x - 17$$

$$E = -(4 + 2x - x^2) - (4x - x^2) + (x - x^2)$$

$$E = -4 - 2x + x^2 - 4x + x^2 + x - x^2$$

$$E = x^2 - 5x - 4$$

$$F = 2x^2 + 3 - (6x^2 - x + 3x^3 - 5x) - (-3x^3 + 9x)$$

$$F = 2x^2 + 3 - 6x^2 + x - 3x^3 + 5x + 3x^3 - 9x$$

$$F = -4x^2 - 3x + 3$$