

Corrigé de l'exercice 1

Développer et réduire chacune des expressions littérales suivantes :

$$A = 4x \times 7$$

$$A = 4 \times x \times 7$$

$$A = 4 \times 7 \times x$$

$A = 28x$

$$B = 6x \times 4$$

$$B = 6 \times x \times 4$$

$$B = 6 \times 4 \times x$$

$B = 24x$

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

$$C = 6x \times 6 - 4 \times 6 + 1$$

$$C = 6 \times x \times 6 - 24 + 1$$

$$C = 6 \times 6 \times x - 23$$

$C = 36x - 23$

$$D = 5 \times (10x + 4) + 6x$$

$$D = 5 \times 10x + 5 \times 4 + 6x$$

$$D = 5 \times 10 \times x + 20 + 6x$$

$$D = 50x + 6x + 20$$

$$D = (50 + 6)x + 20$$

$D = 56x + 20$

$$E = 7x + 4 + (-2x + 6) \times 4$$

$$E = 7x + 4 - 2x \times 4 + 6 \times 4$$

$$E = 7x + 4 - 2 \times x \times 4 + 24$$

$$E = 7x + 4 - 2 \times 4 \times x + 24$$

$$E = 7x + 4 - 8x + 24$$

$$E = 7x - 8x + 4 + 24$$

$$E = (7 - 8)x + 28$$

$E = -x + 28$

Corrigé de l'exercice 2

Développer et réduire chacune des expressions littérales suivantes :

$$A = 4x \times 7$$

$$A = 4 \times x \times 7$$

$$A = 4 \times 7 \times x$$

$A = 28x$

$$B = 9x \times 6$$

$$B = 9 \times x \times 6$$

$$B = 9 \times 6 \times x$$

$B = 54x$

$$C = -7 + 6 \times (-5x - 8)$$

$$C = -7 + 6 \times (-5x) + 6 \times (-8)$$

$$C = -7 + 6 \times (-5) \times x - 48$$

$$C = -7 - 30x - 48$$

$$C = -30x - 7 - 48$$

$C = -30x - 55$

$$D = 8x + 6 \times (-5x - 9)$$

$$D = 8x + 6 \times (-5x) + 6 \times (-9)$$

$$D = 8x + 6 \times (-5) \times x - 54$$

$$D = 8x - 30x - 54$$

$$D = (8 - 30)x - 54$$

$D = -22x - 54$

$$E = (-6x + 1) \times 7 + x + 2$$

$$E = -6x \times 7 + 1 \times 7 + x + 2$$

$$E = -6 \times x \times 7 + 7 + x + 2$$

$$E = -6 \times 7 \times x + x + 7 + 2$$

$$E = -42x + x + 7 + 2$$

$$E = (-42 + 1)x + 9$$

$E = -41x + 9$

Corrigé de l'exercice 3

Développer et réduire chacune des expressions littérales suivantes :

$$A = 2 \times 2x$$

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

$A = 4x$

$$B = 4x \times 7$$

$$B = 4 \times x \times 7$$

$$B = 4 \times 7 \times x$$

$B = 28x$

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

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

$$C = -3 \times x \times 3 + 24 + 7x - 7$$

$$C = -3 \times 3 \times x + 7x + 24 - 7$$

$$C = -9x + 7x + 24 - 7$$

$$C = (-9 + 7) x + 17$$

$$C = -2x + 17$$

$$D = (8x + 4) \times 5 - 10x$$

$$D = 8x \times 5 + 4 \times 5 - 10x$$

$$D = 8 \times x \times 5 + 20 - 10x$$

$$D = 8 \times 5 \times x - 10x + 20$$

$$D = 40x - 10x + 20$$

$$D = (40 - 10)x + 20$$

$$D = 30x + 20$$

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

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

$$E = 10 + 8 \times x \times 9 - 18$$

$$E = 10 + 8 \times 9 \times x - 18$$

$$E = 10 + 72x - 18$$

$$E = 72x + 10 - 18$$

$$E = 72x - 8$$

Corrigé de l'exercice 4

Développer et réduire chacune des expressions littérales suivantes :

$$A = 5 \times 5x$$

$$A = 5 \times 5 \times x$$

$$A = 25x$$

$$B = 9x \times 6$$

$$B = 9 \times x \times 6$$

$$B = 9 \times 6 \times x$$

$$B = 54x$$

$$C = -x + 7 \times (-10x - 8)$$

$$C = -x + 7 \times (-10x) + 7 \times (-8)$$

$$C = -x + 7 \times (-10) \times x - 56$$

$$C = -x - 70x - 56$$

$$C = (-1 - 70)x - 56$$

$$C = -71x - 56$$

$$D = 10 + (6x - 6) \times 4$$

$$D = 10 + 6x \times 4 - 6 \times 4$$

$$D = 10 + 6 \times x \times 4 - 24$$

$$D = 10 + 6 \times 4 \times x - 24$$

$$D = 10 + 24x - 24$$

$$D = 24x + 10 - 24$$

$$D = 24x - 14$$

$$E = 2x - 5 + (-4x - 3) \times 5$$

$$E = 2x - 5 - 4x \times 5 - 3 \times 5$$

$$E = 2x - 5 - 4 \times x \times 5 - 15$$

$$E = 2x - 5 - 4 \times 5 \times x - 15$$

$$E = 2x - 5 - 20x - 15$$

$$E = 2x - 20x - 5 - 15$$

$$E = (2 - 20)x - 20$$

$$E = -18x - 20$$

Corrigé de l'exercice 5

Développer et réduire chacune des expressions littérales suivantes :

$$A = 4 \times 5x$$

$$A = 4 \times 5 \times x$$

$$A = 20x$$

$$B = 9 \times 3x$$

$$B = 9 \times 3 \times x$$

$$B = 27x$$

$$C = 3 + (7x - 3) \times 5$$

$$C = 3 + 7x \times 5 - 3 \times 5$$

$$C = 3 + 7 \times x \times 5 - 15$$

$$C = 3 + 7 \times 5 \times x - 15$$

$$C = 3 + 35x - 15$$

$$C = 35x + 3 - 15$$

$$C = 35x - 12$$

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

$$D = -9x + 2 \times 3x + 2 \times 5$$

$$D = -9x + 2 \times 3 \times x + 10$$

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

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

$$D = -3x + 10$$

$$E = 5x + 8 + (-x - 5) \times 6$$

$$E = 5x + 8 - x \times 6 - 5 \times 6$$

$$E = 5x + 8 - 1 \times x \times 6 - 30$$

$$E = 5x + 8 - 1 \times 6 \times x - 30$$

$$E = 5x + 8 - 6x - 30$$

$$E = 5x - 6x + 8 - 30$$

$$E = (5 - 6)x - 22$$

$$E = -x - 22$$