

Corrigé de l'exercice 1

Développer et réduire chacune des expressions littérales suivantes :

$$A = 5 \times 6x$$

$$A = 5 \times 6 \times x$$

$$A = 30x$$

$$B = 3 \times 8x$$

$$B = 3 \times 8 \times x$$

$$B = 24x$$

$$C = 6 \times (-10x + 7) + 9x$$

$$C = 6 \times (-10x) + 6 \times 7 + 9x$$

$$C = 6 \times (-10) \times x + 42 + 9x$$

$$C = -60x + 9x + 42$$

$$C = (-60 + 9)x + 42$$

$$C = -51x + 42$$

$$D = (3x + 8) \times 2 + 5$$

$$D = 3x \times 2 + 8 \times 2 + 5$$

$$D = 3 \times x \times 2 + 16 + 5$$

$$D = 3 \times 2 \times x + 21$$

$$D = 6x + 21$$

$$E = 2 \times (x - 7) + 6x - 8$$

$$E = 2 \times x + 2 \times (-7) + 6x - 8$$

$$E = 2x - 14 + 6x - 8$$

$$E = 2x + 6x - 14 - 8$$

$$E = (2 + 6)x - 22$$

$$E = 8x - 22$$

Corrigé de l'exercice 2

Développer et réduire chacune des expressions littérales suivantes :

$$A = 3 \times 7x$$

$$A = 3 \times 7 \times x$$

$$A = 21x$$

$$B = 2x \times 4$$

$$B = 2 \times x \times 4$$

$$B = 2 \times 4 \times x$$

$$B = 8x$$

$$C = 10x + (-5x - 9) \times 8$$

$$C = 10x - 5x \times 8 - 9 \times 8$$

$$C = 10x - 5 \times x \times 8 - 72$$

$$C = 10x - 5 \times 8 \times x - 72$$

$$C = 10x - 40x - 72$$

$$C = (10 - 40)x - 72$$

$$C = -30x - 72$$

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

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

$$D = -8 + 5 \times 8 \times x - 30$$

$$D = -8 + 40x - 30$$

$$D = 40x - 8 - 30$$

$$D = 40x - 38$$

$$E = -4x - 8 + (-9x + 7) \times 2$$

$$E = -4x - 8 - 9x \times 2 + 7 \times 2$$

$$E = -4x - 8 - 9 \times x \times 2 + 14$$

$$E = -4x - 8 - 9 \times 2 \times x + 14$$

$$E = -4x - 8 - 18x + 14$$

$$E = -4x - 18x - 8 + 14$$

$$E = (-4 - 18)x + 6$$

$$E = -22x + 6$$

Corrigé de l'exercice 3

Développer et réduire chacune des expressions littérales suivantes :

$$A = 2x \times 9$$

$$A = 2 \times x \times 9$$

$$A = 2 \times 9 \times x$$

$$A = 18x$$

$$B = 4x \times 8$$

$$B = 4 \times x \times 8$$

$$B = 4 \times 8 \times x$$

$$B = 32x$$

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

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

$$C = 5 \times (-9) \times x + 10 + 3x$$

$$C = -45x + 3x + 10$$

$$C = (-45 + 3)x + 10$$

$$C = -42x + 10$$

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

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

$$D = 7 + 8 \times (-7) \times x - 48$$

$$D = 7 - 56x - 48$$

$$D = -56x + 7 - 48$$

$$D = -56x - 41$$

$$E = x + 2 + (-4x + 1) \times 7$$

$$E = x + 2 - 4x \times 7 + 1 \times 7$$

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

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

$$E = x + 2 - 28x + 7$$

$$E = x - 28x + 2 + 7$$

$$E = (1 - 28) x + 9$$

$$E = -27x + 9$$

Corrigé de l'exercice 4

Développer et réduire chacune des expressions littérales suivantes :

$$A = 8 \times 2x$$

$$A = 8 \times 2 \times x$$

$$A = 16x$$

$$B = 7x \times 6$$

$$B = 7 \times x \times 6$$

$$B = 7 \times 6 \times x$$

$$B = 42x$$

$$C = (-3x - 1) \times 4 + 9x - 4$$

$$C = -3x \times 4 - 1 \times 4 + 9x - 4$$

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

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

$$C = -12x + 9x - 4 - 4$$

$$C = (-12 + 9) x - 8$$

$$C = -3x - 8$$

$$D = (-6x - 10) \times 3 + 4$$

$$D = -6x \times 3 - 10 \times 3 + 4$$

$$D = -6 \times x \times 3 - 30 + 4$$

$$D = -6 \times 3 \times x - 26$$

$$D = -18x - 26$$

$$E = (-5x + 1) \times 5 - 8x$$

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

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

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

$$E = -25x - 8x + 5$$

$$E = (-25 - 8) x + 5$$

$$E = -33x + 5$$

Corrigé de l'exercice 5

Développer et réduire chacune des expressions littérales suivantes :

$$A = 3x \times 4$$

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

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

$$A = 12x$$

$$B = 2 \times 4x$$

$$B = 2 \times 4 \times x$$

$$B = 8x$$

$$C = (7x - 1) \times 3 - 1$$

$$C = 7x \times 3 - 1 \times 3 - 1$$

$$C = 7 \times x \times 3 - 3 - 1$$

$$C = 7 \times 3 \times x - 4$$

$$C = 21x - 4$$

$$D = -x + (-5x + 1) \times 5$$

$$D = -x - 5x \times 5 + 1 \times 5$$

$$D = -x - 5 \times x \times 5 + 5$$

$$D = -x - 5 \times 5 \times x + 5$$

$$D = -x - 25x + 5$$

$$D = (-1 - 25) x + 5$$

$$D = -26x + 5$$

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

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

$$E = 4 \times 4 \times x + 16 - x - 7$$

$$E = 16x - x + 16 - 7$$

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

$$E = 15x + 9$$