

**Exercice 1**

Développer et réduire les expressions suivantes :

$$A = 9x(-2x - 10)$$

$$B = (7x + 2) \times 7x$$

$$C = 4(-5x - 3)$$

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

$$E = (10x - 9) \times 7$$

$$F = (x - 10) \times (-x)$$

$$G = -8(-10x - 7)$$

$$H = -7x(-5x - 10)$$

**Exercice 2**

Développer et réduire les expressions suivantes :

$$A = (-3x - 7) \times 2$$

$$B = 8(10x + 8)$$

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

$$D = -5x(6x - 7)$$

$$E = -9(10x + 3)$$

$$F = 4x(7x + 9)$$

$$G = (-7x + 2) \times (-10x)$$

$$H = (-2x + 6) \times 9x$$

**Exercice 3**

Développer et réduire les expressions suivantes :

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

$$B = x(-8x + 6)$$

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

$$D = (2x - 2) \times (-9x)$$

$$E = (-9x - 3) \times (-8)$$

$$F = -7x(10x - 3)$$

$$G = (-10x - 10) \times 10x$$

$$H = 5(6x - 10)$$

**Exercice 4**

Développer et réduire les expressions suivantes :

$$A = 3x(8x + 8)$$

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

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

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

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

$$F = (6x - 7) \times 5x$$

$$G = (9x - 4) \times 7x$$

$$H = 8x(8x + 9)$$

**Exercice 5**

Développer et réduire les expressions suivantes :

$$A = 7(-6x + 8)$$

$$B = (-7x - 10) \times (-4x)$$

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

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

$$E = -5(-4x - 3)$$

$$F = 2x(9x + 6)$$

$$G = -5x(-7x - 2)$$

$$H = (-5x + 3) \times 3x$$

**Corrigé de l'exercice 1**

Développer et réduire les expressions suivantes :

$$A = 9x(-2x - 10)$$

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

$$A = -18x^2 - 90x$$

$$B = (7x + 2) \times 7x$$

$$B = 7x \times 7x + 7x \times 2$$

$$B = 49x^2 + 14x$$

$$C = 4(-5x - 3)$$

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

$$C = -20x - 12$$

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

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

$$D = -40x + 20$$

$$E = (10x - 9) \times 7$$

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

$$E = 70x - 63$$

$$F = (x - 10) \times (-x)$$

$$F = -x \times x + (-x) \times (-10)$$

$$F = -x^2 + 10x$$

$$G = -8(-10x - 7)$$

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

$$G = 80x + 56$$

$$H = -7x(-5x - 10)$$

$$H = -7x \times (-5x) + (-7x) \times (-10)$$

$$H = 35x^2 + 70x$$

**Corrigé de l'exercice 2**

Développer et réduire les expressions suivantes :

$$A = (-3x - 7) \times 2$$

$$A = 2 \times (-3x) + 2 \times (-7)$$

$$A = -6x - 14$$

$$B = 8(10x + 8)$$

$$B = 8 \times 10x + 8 \times 8$$

$$B = 80x + 64$$

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

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

$$C = -10x - 70$$

$$D = -5x(6x - 7)$$

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

$$D = -30x^2 + 35x$$

$$E = -9(10x + 3)$$

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

$$E = -90x - 27$$

$$F = 4x(7x + 9)$$

$$F = 4x \times 7x + 4x \times 9$$

$$F = 28x^2 + 36x$$

$$G = (-7x + 2) \times (-10x)$$

$$G = -10x \times (-7x) + (-10x) \times 2$$

$$G = 70x^2 - 20x$$

$$H = (-2x + 6) \times 9x$$

$$H = 9x \times (-2x) + 9x \times 6$$

$$H = -18x^2 + 54x$$

**Corrigé de l'exercice 3**

Développer et réduire les expressions suivantes :

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

$$A = 3x \times 6x + 3x \times (-5)$$

$$A = 18x^2 - 15x$$

$$B = x(-8x + 6)$$

$$B = x \times (-8x) + x \times 6$$

$$B = -8x^2 + 6x$$

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

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

$$C = 70x + 63$$

$$D = (2x - 2) \times (-9x)$$

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

$$D = -18x^2 + 18x$$

$$E = (-9x - 3) \times (-8)$$

$$E = -8 \times (-9x) + (-8) \times (-3)$$

$$E = 72x + 24$$

$$F = -7x(10x - 3)$$

$$F = -7x \times 10x + (-7x) \times (-3)$$

$$F = -70x^2 + 21x$$

$$G = (-10x - 10) \times 10x$$

$$G = 10x \times (-10x) + 10x \times (-10)$$

$$G = -100x^2 - 100x$$

$$H = 5(6x - 10)$$

$$H = 5 \times 6x + 5 \times (-10)$$

$$H = 30x - 50$$

**Corrigé de l'exercice 4**

Développer et réduire les expressions suivantes :

$$A = 3x(8x + 8)$$

$$A = 3x \times 8x + 3x \times 8$$

$$A = 24x^2 + 24x$$

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

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

$$B = -8x^2 - 12x$$

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

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

$$C = -80x + 90$$

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

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

$$D = 42x - 60$$

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

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

$$E = -63x^2 + 63x$$

$$F = (6x - 7) \times 5x$$

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

$$F = 30x^2 - 35x$$

$$G = (9x - 4) \times 7x$$

$$G = 7x \times 9x + 7x \times (-4)$$

$$G = 63x^2 - 28x$$

$$H = 8x(8x + 9)$$

$$H = 8x \times 8x + 8x \times 9$$

$$H = 64x^2 + 72x$$

**Corrigé de l'exercice 5**

Développer et réduire les expressions suivantes :

$$A = 7(-6x + 8)$$

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

$$A = -42x + 56$$

$$B = (-7x - 10) \times (-4x)$$

$$B = -4x \times (-7x) + (-4x) \times (-10)$$

$$B = 28x^2 + 40x$$

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

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

$$C = -100x^2 + 30x$$

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

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

$$D = 9x^2 - 90x$$

$$E = -5(-4x - 3)$$

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

$$E = 20x + 15$$

$$F = 2x(9x + 6)$$

$$F = 2x \times 9x + 2x \times 6$$

$$F = 18x^2 + 12x$$

$$G = -5x(-7x - 2)$$

$$G = -5x \times (-7x) + (-5x) \times (-2)$$

$$G = 35x^2 + 10x$$

$$H = (-5x + 3) \times 3x$$

$$H = 3x \times (-5x) + 3x \times 3$$

$$H = -15x^2 + 9x$$