

**Exercice 1**

Développer et réduire les expressions suivantes :

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

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

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

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

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

$$F = (10x + 4) \times (-2)$$

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

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

**Exercice 2**

Développer et réduire les expressions suivantes :

$$A = (x + 5) \times (-4x)$$

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

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

$$D = (-6x - 3) \times (-6)$$

$$E = -6x(-3x - 8)$$

$$F = -3x(-4x - 4)$$

$$G = -3(-7x - 9)$$

$$H = (5x - 2) \times 2x$$

**Exercice 3**

Développer et réduire les expressions suivantes :

$$A = 5x(4x + 4)$$

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

$$C = 4x(-3x - 10)$$

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

$$E = 3(-6x - 8)$$

$$F = (9x - 5) \times 4x$$

$$G = 9(8x - 9)$$

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

**Exercice 4**

Développer et réduire les expressions suivantes :

$$A = (-10x - 4) \times (-3x)$$

$$B = 4x(-2x - 6)$$

$$C = (-3x - 8) \times (-10x)$$

$$D = (2x - 10) \times (-4x)$$

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

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

$$G = (2x + 2) \times x$$

$$H = (3x + 10) \times 3$$

**Exercice 5**

Développer et réduire les expressions suivantes :

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

$$B = (8x - 2) \times (-3x)$$

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

$$D = 8(-x - 9)$$

$$E = (x - 7) \times 6$$

$$F = -4(-2x + 5)$$

$$G = -10x(-x - 6)$$

$$H = (x + 6) \times 7x$$

**Corrigé de l'exercice 1**

Développer et réduire les expressions suivantes :

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

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

$$A = -24x + 21$$

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

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

$$B = -16x - 28$$

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

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

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

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

$$D = -6x \times (-9x) + (-6x) \times 3$$

$$D = 54x^2 - 18x$$

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

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

$$E = -48x + 30$$

$$F = (10x + 4) \times (-2)$$

$$F = -2 \times 10x + (-2) \times 4$$

$$F = -20x - 8$$

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

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

$$G = -56x - 64$$

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

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

$$H = 2x^2 + 6x$$

**Corrigé de l'exercice 2**

Développer et réduire les expressions suivantes :

$$A = (x + 5) \times (-4x)$$

$$A = -4x \times x + (-4x) \times 5$$

$$A = -4x^2 - 20x$$

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

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

$$B = -15x + 50$$

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

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

$$C = -10x^2 - 50x$$

$$D = (-6x - 3) \times (-6)$$

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

$$D = 36x + 18$$

$$E = -6x(-3x - 8)$$

$$E = -6x \times (-3x) + (-6x) \times (-8)$$

$$E = 18x^2 + 48x$$

$$F = -3x(-4x - 4)$$

$$F = -3x \times (-4x) + (-3x) \times (-4)$$

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

$$G = -3(-7x - 9)$$

$$G = -3 \times (-7x) + (-3) \times (-9)$$

$$G = 21x + 27$$

$$H = (5x - 2) \times 2x$$

$$H = 2x \times 5x + 2x \times (-2)$$

$$H = 10x^2 - 4x$$

**Corrigé de l'exercice 3**

Développer et réduire les expressions suivantes :

$$A = 5x(4x + 4)$$

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

$$A = 20x^2 + 20x$$

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

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

$$B = -15x^2 - 21x$$

$$C = 4x(-3x - 10)$$

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

$$C = -12x^2 - 40x$$

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

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

$$D = -42x^2 + 49x$$

$$E = 3(-6x - 8)$$

$$E = 3 \times (-6x) + 3 \times (-8)$$

$$E = -18x - 24$$

$$F = (9x - 5) \times 4x$$

$$F = 4x \times 9x + 4x \times (-5)$$

$$F = 36x^2 - 20x$$

$$G = 9(8x - 9)$$

$$G = 9 \times 8x + 9 \times (-9)$$

$$G = 72x - 81$$

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

$$H = 8 \times 9x + 8 \times (-8)$$

$$H = 72x - 64$$

**Corrigé de l'exercice 4**

Développer et réduire les expressions suivantes :

$$A = (-10x - 4) \times (-3x)$$

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

$$A = 30x^2 + 12x$$

$$B = 4x(-2x - 6)$$

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

$$B = -8x^2 - 24x$$

$$C = (-3x - 8) \times (-10x)$$

$$C = -10x \times (-3x) + (-10x) \times (-8)$$

$$C = 30x^2 + 80x$$

$$D = (2x - 10) \times (-4x)$$

$$D = -4x \times 2x + (-4x) \times (-10)$$

$$D = -8x^2 + 40x$$

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

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

$$E = -5x^2 + 20x$$

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

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

$$F = -14x + 56$$

$$G = (2x + 2) \times x$$

$$G = x \times 2x + x \times 2$$

$$G = 2x^2 + 2x$$

$$H = (3x + 10) \times 3$$

$$H = 3 \times 3x + 3 \times 10$$

$$H = 9x + 30$$

**Corrigé de l'exercice 5**

Développer et réduire les expressions suivantes :

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

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

$$A = -15x^2 + 6x$$

$$B = (8x - 2) \times (-3x)$$

$$B = -3x \times 8x + (-3x) \times (-2)$$

$$B = -24x^2 + 6x$$

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

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

$$C = -50x + 90$$

$$D = 8(-x - 9)$$

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

$$D = -8x - 72$$

$$E = (x - 7) \times 6$$

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

$$E = 6x - 42$$

$$F = -4(-2x + 5)$$

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

$$F = 8x - 20$$

$$G = -10x(-x - 6)$$

$$G = -10x \times (-x) + (-10x) \times (-6)$$

$$G = 10x^2 + 60x$$

$$H = (x + 6) \times 7x$$

$$H = 7x \times x + 7x \times 6$$

$$H = 7x^2 + 42x$$