

Exercice 1

Développer et réduire les expressions suivantes :

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

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

$$C = -5x(6x - 8)$$

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

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

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

$$G = (2x - 2) \times 8x$$

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

Exercice 2

Développer et réduire les expressions suivantes :

$$A = -3(-5x + 4)$$

$$B = (4x - 5) \times (-3)$$

$$C = 6x(6x - 6)$$

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

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

$$F = (5x + 8) \times (-5x)$$

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

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

Exercice 3

Développer et réduire les expressions suivantes :

$$A = (-6x - 1)(3x - 1)$$

$$B = (2x + 2)(7x - 2)$$

$$C = (-9x - 9)(10x + 1)$$

$$D = (-7x - 9)(-2x - 2)$$

$$E = (-9x + 2)(2x - 4)$$

$$F = (8x - 9)(2x - 10)$$

Exercice 4

Développer et réduire les expressions suivantes :

$$A = (-5x + 6)(-4x - 7)$$

$$B = (-4x + 8)(-2x - 4)$$

$$C = (9x + 7)(-5x + 7)$$

$$D = (-7x + 2)(-6x - 5)$$

$$E = (10x - 8)(-10x - 9)$$

$$F = (5x + 5)(-3x + 2)$$

Exercice 5

Développer et réduire les expressions suivantes :

$$A = (2x + 6)(3x + 5)$$

$$B = (-9x + 1)(x - 7)$$

$$C = (-8x + 2)(10x - 5)$$

$$D = (-x - 1)(-3x - 6)$$

$$E = (x + 1)(7x - 3)$$

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

Corrigé de l'exercice 1

Développer et réduire les expressions suivantes :

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

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

$$A = 72x - 80$$

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

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

$$B = 50x - 90$$

$$C = -5x(6x - 8)$$

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

$$C = -30x^2 + 40x$$

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

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

$$D = 6x - 9$$

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

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

$$E = -8x^2 + 5x$$

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

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

$$F = -4x^2 - 8x$$

$$G = (2x - 2) \times 8x$$

$$G = 8x \times 2x + 8x \times (-2)$$

$$G = 16x^2 - 16x$$

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

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

$$H = -18x^2 + 72x$$

Corrigé de l'exercice 2

Développer et réduire les expressions suivantes :

$$A = -3(-5x + 4)$$

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

$$A = 15x - 12$$

$$B = (4x - 5) \times (-3)$$

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

$$B = -12x + 15$$

$$C = 6x(6x - 6)$$

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

$$C = 36x^2 - 36x$$

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

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

$$D = -60x - 60$$

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

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

$$E = 16x + 28$$

$$F = (5x + 8) \times (-5x)$$

$$F = -5x \times 5x + (-5x) \times 8$$

$$F = -25x^2 - 40x$$

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

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

$$G = -16x^2 - 16x$$

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

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

$$H = 30x^2 + 30x$$

Corrigé de l'exercice 3

Développer et réduire les expressions suivantes :

$$A = (-6x - 1)(3x - 1)$$

$$A = -18x^2 + 6x + (-3x) + 1$$

$$A = -18x^2 + 3x + 1$$

$$B = (2x + 2)(7x - 2)$$

$$B = 14x^2 + (-4x) + 14x + (-4)$$

$$B = 14x^2 + 10x - 4$$

$$C = (-9x - 9)(10x + 1)$$

$$C = -90x^2 + (-9x) + (-90x) + (-9)$$

$$C = -90x^2 - 99x - 9$$

$$D = (-7x - 9)(-2x - 2)$$

$$D = 14x^2 + 14x + 18x + 18$$

$$D = 14x^2 + 32x + 18$$

$$E = (-9x + 2)(2x - 4)$$

$$E = -18x^2 + 36x + 4x + (-8)$$

$$E = -18x^2 + 40x - 8$$

$$F = (8x - 9)(2x - 10)$$

$$F = 16x^2 + (-80x) + (-18x) + 90$$

$$F = 16x^2 - 98x + 90$$

Corrigé de l'exercice 4

Développer et réduire les expressions suivantes :

$$A = (-5x + 6)(-4x - 7)$$

$$A = 20x^2 + 35x + (-24x) + (-42)$$

$$A = 20x^2 + 11x - 42$$

$$B = (-4x + 8)(-2x - 4)$$

$$B = 8x^2 + 16x + (-16x) + (-32)$$

$$B = 8x^2 - 32$$

$$C = (9x + 7)(-5x + 7)$$

$$C = -45x^2 + 63x + (-35x) + 49$$

$$C = -45x^2 + 28x + 49$$

$$D = (-7x + 2)(-6x - 5)$$

$$D = 42x^2 + 35x + (-12x) + (-10)$$

$$D = 42x^2 + 23x - 10$$

$$E = (10x - 8)(-10x - 9)$$

$$E = -100x^2 + (-90x) + 80x + 72$$

$$E = -100x^2 - 10x + 72$$

$$F = (5x + 5)(-3x + 2)$$

$$F = -15x^2 + 10x + (-15x) + 10$$

$$F = -15x^2 - 5x + 10$$

Corrigé de l'exercice 5

Développer et réduire les expressions suivantes :

$$A = (2x + 6)(3x + 5)$$

$$A = 6x^2 + 10x + 18x + 30$$

$$A = 6x^2 + 28x + 30$$

$$B = (-9x + 1)(x - 7)$$

$$B = -9x^2 + 63x + x + (-7)$$

$$B = -9x^2 + 64x - 7$$

$$C = (-8x + 2)(10x - 5)$$

$$C = -80x^2 + 40x + 20x + (-10)$$

$$C = -80x^2 + 60x - 10$$

$$D = (-x - 1)(-3x - 6)$$

$$D = 3x^2 + 6x + 3x + 6$$

$$D = 3x^2 + 9x + 6$$

$$E = (x + 1)(7x - 3)$$

$$E = 7x^2 + (-3x) + 7x + (-3)$$

$$E = 7x^2 + 4x - 3$$

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

$$F = 90x^2 + 45x + (-90x) + (-45)$$

$$F = 90x^2 - 45x - 45$$