

Exercice 1

Développer et réduire les expressions suivantes :

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

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

$$C = 5x(-2x - 2)$$

$$D = 3x(-5x - 9)$$

$$E = 4(7x - 7)$$

$$F = (-10x - 2) \times 3x$$

$$G = (3x - 4) \times (-4)$$

$$H = (7x - 7) \times (-2x)$$

Exercice 2

Développer et réduire les expressions suivantes :

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

$$B = (-6x + 2) \times (-5)$$

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

$$D = -2x(-x + 2)$$

$$E = (-4x - 10) \times 8x$$

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

$$G = (-10x - 7) \times 3x$$

$$H = -10x(3x - 2)$$

Exercice 3

Développer et réduire les expressions suivantes :

$$A = (5x - 2)(10x + 6)$$

$$B = (-x - 4)(5x - 1)$$

$$C = (-10x - 3)(3x - 5)$$

$$D = (2x + 4)(-3x - 6)$$

$$E = (-5x + 2)(4x - 9)$$

$$F = (-2x - 1)(3x - 2)$$

Exercice 4

Développer et réduire les expressions suivantes :

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

$$B = (9x - 10)(8x + 1)$$

$$C = (-5x + 3)(-6x - 4)$$

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

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

$$F = (-x + 7)(9x + 3)$$

Exercice 5

Développer et réduire les expressions suivantes :

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

$$B = (-4x + 10)(-10x - 5)$$

$$C = (-3x - 10)(-2x + 1)$$

$$D = (3x - 4)(-5x - 6)$$

$$E = (2x - 10)(-3x + 1)$$

$$F = (-9x + 7)(-8x - 5)$$

Corrigé de l'exercice 1

Développer et réduire les expressions suivantes :

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

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

$$A = -28x + 28$$

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

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

$$B = 4x^2 - 24x$$

$$C = 5x(-2x - 2)$$

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

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

$$D = 3x(-5x - 9)$$

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

$$D = -15x^2 - 27x$$

$$E = 4(7x - 7)$$

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

$$E = 28x - 28$$

$$F = (-10x - 2) \times 3x$$

$$F = 3x \times (-10x) + 3x \times (-2)$$

$$F = -30x^2 - 6x$$

$$G = (3x - 4) \times (-4)$$

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

$$G = -12x + 16$$

$$H = (7x - 7) \times (-2x)$$

$$H = -2x \times 7x + (-2x) \times (-7)$$

$$H = -14x^2 + 14x$$

Corrigé de l'exercice 2

Développer et réduire les expressions suivantes :

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

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

$$A = -30x - 30$$

$$B = (-6x + 2) \times (-5)$$

$$B = -5 \times (-6x) + (-5) \times 2$$

$$B = 30x - 10$$

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

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

$$C = -28x - 8$$

$$D = -2x(-x + 2)$$

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

$$D = 2x^2 - 4x$$

$$E = (-4x - 10) \times 8x$$

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

$$E = -32x^2 - 80x$$

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

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

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

$$G = (-10x - 7) \times 3x$$

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

$$G = -30x^2 - 21x$$

$$H = -10x(3x - 2)$$

$$H = -10x \times 3x + (-10x) \times (-2)$$

$$H = -30x^2 + 20x$$

Corrigé de l'exercice 3

Développer et réduire les expressions suivantes :

$$A = (5x - 2)(10x + 6)$$

$$A = 50x^2 + 30x + (-20x) + (-12)$$

$$A = 50x^2 + 10x - 12$$

$$B = (-x - 4)(5x - 1)$$

$$B = -5x^2 + x + (-20x) + 4$$

$$B = -5x^2 - 19x + 4$$

$$C = (-10x - 3)(3x - 5)$$

$$C = -30x^2 + 50x + (-9x) + 15$$

$$C = -30x^2 + 41x + 15$$

$$D = (2x + 4)(-3x - 6)$$

$$D = -6x^2 + (-12x) + (-12x) + (-24)$$

$$D = -6x^2 - 24x - 24$$

$$E = (-5x + 2)(4x - 9)$$

$$E = -20x^2 + 45x + 8x + (-18)$$

$$E = -20x^2 + 53x - 18$$

$$F = (-2x - 1)(3x - 2)$$

$$F = -6x^2 + 4x + (-3x) + 2$$

$$F = -6x^2 + x + 2$$

Corrigé de l'exercice 4

Développer et réduire les expressions suivantes :

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

$$A = -60x^2 + (-30x) + 50x + 25$$

$$A = -60x^2 + 20x + 25$$

$$B = (9x - 10)(8x + 1)$$

$$B = 72x^2 + 9x + (-80x) + (-10)$$

$$B = 72x^2 - 71x - 10$$

$$C = (-5x + 3)(-6x - 4)$$

$$C = 30x^2 + 20x + (-18x) + (-12)$$

$$C = 30x^2 + 2x - 12$$

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

$$D = -9x^2 + (-2x) + (-63x) + (-14)$$

$$D = -9x^2 - 65x - 14$$

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

$$E = -3x^2 + 4x + (-6x) + 8$$

$$E = -3x^2 - 2x + 8$$

$$F = (-x + 7)(9x + 3)$$

$$F = -9x^2 + (-3x) + 63x + 21$$

$$F = -9x^2 + 60x + 21$$

Corrigé de l'exercice 5

Développer et réduire les expressions suivantes :

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

$$A = 5x^2 + (-25x) + 7x + (-35)$$

$$A = 5x^2 - 18x - 35$$

$$B = (-4x + 10)(-10x - 5)$$

$$B = 40x^2 + 20x + (-100x) + (-50)$$

$$B = 40x^2 - 80x - 50$$

$$C = (-3x - 10)(-2x + 1)$$

$$C = 6x^2 + (-3x) + 20x + (-10)$$

$$C = 6x^2 + 17x - 10$$

$$D = (3x - 4)(-5x - 6)$$

$$D = -15x^2 + (-18x) + 20x + 24$$

$$D = -15x^2 + 2x + 24$$

$$E = (2x - 10)(-3x + 1)$$

$$E = -6x^2 + 2x + 30x + (-10)$$

$$E = -6x^2 + 32x - 10$$

$$F = (-9x + 7)(-8x - 5)$$

$$F = 72x^2 + 45x + (-56x) + (-35)$$

$$F = 72x^2 - 11x - 35$$