Exercice 1 :

$G = -4 \times 7 + (-4) \times x = -28 - 4x$

$H = x \times 6 - x \times 5x = 6x - 5x^2$

$K = 3x \times 8 - 3x \times 2x = 24x - 6x^2$

$L = -2 \times 3x + (-2) \times 5 = -6x - 10$

Exercice 2 :

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

$= x^2 + 7x + 12$

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

$= x^2 + 6x + 8$

$C = x \times x + x \times (-2) + 1 \times x + 1 \times (-2)$

$= x^2 - x - 2$

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

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

Exercice 3 :

$A = 4x \times x + 4x \times 3 + 5 \times x + 5 \times 3$

$= 4x^2 + 17x + 15$

$B = x \times 2x + x \times 6 + 1 \times 2x + 1 \times 6$

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

$C = 5x \times 2 + 5x \times (-x) + 1 \times 2 + 1 \times (-x)$

$= -5x^2 + 9x + 2$

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

$= -x^2 + 8x - 15$

Exercice 4 :

$A = 4x \times (-2x) + 4x \times (-5) + 3 \times (-2x) + 3 \times (-5) = -8x^2 - 26x - 15$

$B = 5x \times 3 + 5x \times (-4x) + (-2) \times 3 + (-2) \times (-4x) = -20x^2 + 23x - 6$

$C = 5x \times 2 + 5x \times (-3x) + 1 \times 2 + 1 \times (-3x) = -15x^2 + 7x + 2$

$D = (-x) \times 4x + (-x) \times (-2) + 6 \times 4x + 6 \times (-2) = -4x^2 + 26x - 12$

Exercice 5 :

$A = 6 \times (x + y)$

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

$C = b \times (8 + a)$

$D = 7 \times (c - 4)$

Exercice 6 :

$A = k \times (5 + t)$

$B = a \times (9 + 8)$

$C = 2 \times (s - w)$

$D = 7(b - d)$

Exercice 7 :

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

$B = 3(x + 2)$

$C = 2(x^2 - 2x - 3)$

$D = 3x(x + 2)$

Exercice 8 :

$A = (x + 1)(5 + x)$

$B = (x - 1)[(2x + 3) + (5x - 2)]$

$= (x - 1)[2x + 3 + 5x - 2]$

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

$C = (2x - 5)[(4x - 3) - (3x - 1)]$

$= (2x - 5)[4x - 3 - 3x + 1]$

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

$D = (x + 3)[2(3x - 1) - 3(4x + 1)]$

$= (x + 3)[6x - 2 - 13x - 3]$

$= (x + 3)(-7x - 5)$

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

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

$F = (2x + 5)[(3x - 7) - (5x - 3)]$

$= (2x + 5)[3x - 7 - 5x + 3]$

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

$G = (x - 1)[(5x + 7) + (3x - 4)]$

$= (x - 1)[5x + 7 + 3x - 4]$

$= (x - 1)(8x + 3)$

$H = (x - 5)[(3x - 2) + (x - 5)]$

$= (x - 5)[3x - 2 + x - 5]$

$= (x - 5)(4x - 7)$

Exercice 9 :

$A = x^2 + 4x + 4$

$B = x^2 - 6x + 9$

$C = 9x^2 + 30x + 25$

$D = 9 - 24b + 16b^2$

$E = b^2 - 14b + 49$

$F = x^2 - 25$

$G = 16b^2 - 24b + 9$

$H = 36 + 60a + 25a^2$

$I = 16 - 49x^2$

$J = 16 - 8b + b^2$

Exercice 10 :

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

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

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

$D = (8 - 5y)(8 + 5y)$

$E = (2 - 6a)(2 + 6a)$

$F = (7y - 3)(7y + 3)$