

Exercices de factorisation

$$a(x) = -3x + 6$$

$$b(x) = -5x - 10$$

$$c(x) = 7x - 21$$

$$d(x) = 3ab - 5a^2c - 7a^3b$$

$$e(x) = 7abc - 8bc + 21abe$$

$$f(x) = -3xy + 10yz - 13yt$$

$$g(x) = 3a^2c - 15ab^2 + 21a^2b^2c$$

$$h(x) = -7x^2y + 35xz^2 - 28xyz^2$$

$$i(x) = 5xyz - 10xz^2 + 30yz$$

$$j(x) = 2a^2b^2c - 6bc^2 + 10abc^3$$

$$k(x) = -5x^2yz + 35xz^2 - 40x^2y^2z^2$$

$$l(x) = 3a^2bc + 15a^3b^2d - 39a^2bc$$

$$m(x) = (2x+5)(3x-1) - (3x-7)(3x-1)$$

$$n(x) = (-5x+4)(-2x-5) + (-7x+4)(-4x-10)$$

$$o(x) = (2x-3)(4x-7) - (3x-9)(-4x+7)$$

$$p(x) = (-3x-7)(2x-5) + 4x^2 - 25$$

$$q(x) = (-5x-10)(3x-5) + (2x+4)(-3x-7)$$

$$r(x) = (-3x-9)(-3x+7) + 5(x^2-9)$$

$$s(x) = (-2x+4)(-3x+7) + 5(x-2)^2$$

$$t(x) = 4x^2 + 4x + 1$$

$$u(x) = 9x^2 - 6x + 1$$

$$v(x) = 49x^2 - 25y^2$$

$$w(x) = 2x^2 - 4x + 2$$

$$x(x) = -(x-3)^2 + (3x-8)^2$$

$$y(x) = (2x-7)^2 - 25(x-8)^2$$

$$z(x) = -16(x-5)^2 + 36(3x-2)^2$$

Parcours 1

$$A_1 = (2x+1)(3x+5) + (4x+2)(2x+1)$$

$$B_1 = (x-2)(x+3) + (x-2)(4x-1)$$

$$C_1 = (5x-3)(2x-5) - x(5x-3)$$

$$D_1 = (x+1)(x+3) - 5(x+3)$$

$$E_1 = (x+4)(x-2) + (3x+1)(x+4)$$

$$F_1 = (x-3)(2x+1) + (2x+1)(3x-2)$$

$$G_1 = (3x+2)(7x-1) - 10(7x-1)$$

$$H_1 = 2(6x-7) + (6x-7)(x+3)$$

$$I_1 = -7(3x-7)(-2x-7) + 5(3x-7)(x+3)$$

Parcours 2

$$A_2 = 64x^2 - 49$$

$$B_2 = 16x^2 - 40x + 25$$

$$C_2 = t^2 + 12t + 36$$

$$D_2 = y^2 - 81$$

$$E_2 = 9x^2 - 24x + 16$$

$$F_2 = x^2 + 14x + 49$$

$$G_2 = 100t^2 - 121$$

$$H_2 = 9x^2 - 6x + 1$$

$$I_2 = 49x^2 - 42x + 9$$

$$J_2 = 64x^2 - 81$$

Parcours 3

$$A_3 = (7x+3)(3x-2) + 3x-2$$

$$B_3 = 8x-5 - (8x+1)(8x-5)$$

$$C_3 = 3(3x-7)^2 - 3x+7$$

$$D_3 = (6x-1)(7x-3) + 7x-3$$

$$E_3 = 6x+1 + (6x+1)(x-5)$$

$$F_3 = (3x+2)(7x-1) - 7x+1$$

$$G_3 = (x-3)(2x+1) + 2x+1$$

$$H_3 = (x+4)(x-2) - x-4$$

$$I_3 = 3-7x - (x+4)(7x-3)$$

Parcours 4

$$A_4 = (2x-1)(3x+5) + (4x+2)(1-2x)$$

$$B_4 = (x-2)(x+3) + (2-x)(4x-1)$$

$$C_4 = (5x-3)(2x-5) - x(3-5x)$$

$$D_4 = (x+1)(x-3) - 5(3-x)$$

$$E_4 = (x-4)(x-2) + (3x+1)(4-x)$$

$$F_4 = (x-3)(2x-1) + (1-2x)(3x-2)$$

$$G_4 = (3x+2)(7x-1) - 10(1-7x)$$

$$H_4 = 2(6x-7) + (7-6x)(x+3)$$

$$I_4 = -7(-3x-4) + (-7-6x)(3x+4)$$

$$J_4 = -5(-3x-9) + 3x(x+3) + (-7-6x)(2x+6)$$

$$K_4 = -3(6x-21) + 3x(-4x+14) - (-7-6x)(-2x+7)$$

$$L_4 = -3(6x-21) + 3x(-4x+14) - (-7-6x)(-2x+7)$$

Parcours 5

$$A_5 = 9x^2 - 16 + (3x+4)(3x-2)$$

$$B_5 = (4x-1)^2 - (x-5)^2$$

$$C_5 = (7x-5)(3x+2) - 6(3x+2)(x+3)$$

$$D_5 = (2x+3)(2x-1) + 4x^2 + 12x + 9$$

$$E_5 = (x+4)(-2x+1) - 3(x+4)^2$$

$$F_5 = x^2 - 9 - (2x+5)(x-3) + 5x - 15$$

$$G_5 = 4x^2 - 9 + (2x+3)(x-5)$$

$$H_5 = (2x+7)^2 + 10x + 35$$

$$I_5 = x^2 - 16 + (x+4)^2$$

Parcours 6

$$A_6 = 9x^2 - 5x$$

$$B_6 = 6x + 9$$

$$C_6 = x(x+5) + x(3x-2)$$

$$D_6 = (x+4)(x-6) + (-1+x)(x-6)$$

$$E_6 = (3x-1) - (3x-1)^2$$

$$F_6 = x^2 + 8x + 16$$

$$G_6 = 4 - x^2$$

$$H_6 = 9x^2 - 30x + 25$$

$$I_6 = 25 - 36x^2$$

$$J_6 = (4x-3)^2 - 1$$

Parcours 7

$$A_7 = (2x+1)^2 - (4x+2)(2x+1)$$

$$B_7 = (x-2)^2 + (x-2)(4x-1)$$

$$C_7 = (5x-3)^2 - x(5x-3)$$

$$D_7 = (x+1)(x+3) - (x+3)^2$$

$$E_7 = 5(x+4)^2 - (3x+1)(x+4)$$

$$F_7 = (x-3)(2x+1) - 7(2x+1)^2$$

$$G_7 = (7x-1)^2 - 10(7x-1)$$

$$H_7 = 2(6x-7) - 7(6x-7)^2$$

$$I_7 = -5(2x-5)^2 - 7(2x-5)(x+3)$$

Parcours 8

$$A_8 = (2x+1)(3x+5) - (6x+3)(2x+1) - (-1-2x)^2$$

$$B_8 = (x-2)(x+3) - 7(x^2-4) - (-5x+10)(-3x+7)$$

$$C_8 = (5x-3)(2x-5) - 7x(-15x+9) - 7(3-5x)$$

$$D_8 = (x+1)(-6-2x) - 5(x+3) + 5(3x+9)^2$$

$$E_8 = -7(x+4)(x-2) + 8x^2 - 32 - (4-2x)(-x-7)$$

$$F_8 = -3(x-3)(2x+1) + (4x+2)^2 - 5(3x-2)(-3-6x)$$

$$G_8 = (-3x+2)(7x-1) - 10(-7x+1) - 3(-7x+1)^2$$