Factorisation IR

Niveau 3

Exercice 3 p 19

$$J = (x-4)^2 - (2x-1)^2$$

$$J = (x-4+(2x-1))(x-4-(2x-1))$$

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

$$K = (7x+8)^2 - (9-5x)^2$$

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

$$= (2x+17)(12x-1)$$

F2 - Factorisation 1

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

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

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

$$= (-10x+6)(-15x+8)$$

$$B = 4 - (7x-7)^2$$

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

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

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

$C = (-8x-1)(x-1) - (-8x-1)$

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

$= (-8x-1)(x-2)$

$D = 36x^2 - 36$

$= (6x)^2 - 6$

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

$E = (9x-8)(3x-10) + (-9x-2)(9x-8)$

$= (9x-8)(3x-10-9x-2)$

$= (9x-8)(-6x-12)$

$F = -(2x-4)(6x+2) + 4x^2 - 16$

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

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

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

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

F2 - Fact 2

$A = -(3x+5) + (3x-8)(3x+5)$

$= (3x+5)(-1+3x-8)$

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

$B = 100x^2 - 81 - (10x+9)(2x-10)$

$= (10x+9)(10x-9) - (10x+9)(2x-10)$

$= (10x+9)(10x-9-(2x-10))$

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

$C = 100x^2 - 36$

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

$D = 81 - (5x-1)^2$

$= 9^2 - (5x-1)^2$

$= (9+5x-1)(9-5x+1)$

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

$E = (8x-3)(-7x-7) + (-7x-7)^2$

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

$= (-7x-7)(8x-3.-7x-7)$

$= (-7x-7)(x-10)$

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

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

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

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