

- $6x^2 - 3xy + 21x = 3x(2x - y + 7)$

- $3x - 3y + x^2 - xy = 3(x - y) + x(x - y) = (x - y)(3 + x)$

- $25x^2 - 80x + 64 = (5x - 8)^2$

- $9 - 25y^2 = (3 - 5y)(3 + 5y)$

- $18x - 8a^2x = 2x(9 - 4a^2) = 2x(3 - 2a)(3 + 2a)$

- $5x^2 - 5y^2 = 5(x^2 - y^2) = 5(x - y)(x + y)$

- $x^7 - x^3 = x^3(x^4 - 1) = x^3(x^2 + 1)(x^2 - 1) = x^3(x^2 + 1)(x - 1)(x + 1)$

- $a^2x + 2abx + b^2x = x(a^2 + 2ab + b^2) = x(a + b)^2$

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

- $9x^3 - 81x = 9x(x^2 - 9) = 9x(x - 3)(x + 3)$

- $5a - 5b + ax - bx = 5(a - b) + x(a - b) = (a - b)(5 + x)$

- $a^2 - 5a + \frac{25}{4} = \left(a - \frac{5}{2}\right)^2$

- $6ax - 6a^2 + x - a = 6a(x - a) + 1(x - a) = (x - a)(6a + 1)$

- $5x^2 - 10x + 5 = 5(x^2 - 2x + 1) = 5(x - 1)^2$

- $14a^2 - 14ab + 2a^2x - 2abx = 2a(7a - 7b + ax - bx) =$
 $= 2a[7(a - b) + x(a - b)] = 2a(a - b)(7 + x)$