

$$(أ) (x-5)(3x+2) + x^2 - 25 \quad ؛ \quad (ب) 9x^2 - (x+1)^2 \quad ؛ \quad (ج) x(x^2 - 3)$$

الحل :

$$(x-5)(3x+2) + x^2 - 25 = (x-5)(3x+2) + (x-5)(x+5) = (x-5)(3x+2+x+5) \quad (1)$$

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

$$9x^2 - (x+1)^2 = (3x-x-1)(3x+x+1) = (2x-1)(4x+1) \quad (2)$$

$$x(x^2 - 3) = x(x - \sqrt{3})(x + \sqrt{3}) \quad (3)$$