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$$x^2 + 6x + 9 = x^2 + 2 \cdot 3x + 3^2 = (x+3)^2$$

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

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

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

$$a^2 + 2a + 1 = (a+1)^2$$

$$x^2 - 25 = x^2 - 5^2 = (x-5)(x+5)$$

Να αποδείξετε ότι ισχύει η ισότητα.

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

$$x^2 - x - (1^2 - 2 \cdot 1 \cdot x + x^2) = x-1$$

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

$$\cancel{x^2} - x - 1 + 2x - \cancel{x^2} = x-1$$

$$1x - 1 = x-1 \quad \text{ισχύει}$$

$$(a-b)^2 - (a+b)^2 = -4ab$$

$$a^2 - 2ab + b^2 - (a^2 + 2ab + b^2) = -4ab$$

$$\cancel{a^2} - 2ab + \cancel{b^2} - \cancel{a^2} - 2ab - \cancel{b^2} = -4ab$$

$$-4ab = -4ab \quad \text{ισχύει}$$

HW. Ασκ 4: σελ 52