

$$\alpha) f(x) = g(x) \Leftrightarrow x^2 - 2x = 3x - 4 \Leftrightarrow x^2 - 5x + 4 = 0$$
$$\Leftrightarrow x = 1 \quad \eta \quad x = 4$$

$$\beta) f(x) < g(x) \Leftrightarrow x^2 - 5x + 4 < 0 \Leftrightarrow 1 < x < 4$$

$$\gamma) f(x) > \alpha \Leftrightarrow x^2 - 2x - \alpha > 0$$

$$\Delta = 4 + 4\alpha = 4(\alpha + 1) < 0$$

$$\Rightarrow x^2 - 2x - \alpha > 0 \text{ για}$$
$$\text{υπόθεσ } x \in \mathbb{R}$$