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$$\alpha) \begin{cases} f(2) = 4 - 8 + a = a - 4 \\ g(2) = 2a - 5 \end{cases} \Rightarrow 2a - 5 = a - 4 \Leftrightarrow \boxed{\alpha = 1}$$

$$\beta) \text{ Για } a = 1 \quad f(x) = x^2 - 4x + 1, \quad g(x) = x - 5$$

$$(i) f(x) = g(x) \Leftrightarrow x^2 - 4x + 1 = x - 5 \Leftrightarrow$$

$$x^2 - 5x + 6 = 0 \Leftrightarrow x = 2 \quad \text{ή} \quad x = 3$$

$$(ii) f(x) \geq g(x) \Leftrightarrow x^2 - 4x + 1 \geq x - 5 \Leftrightarrow$$

$$x^2 - 5x + 6 \geq 0 \Leftrightarrow x \leq 2 \quad \text{ή} \quad x \geq 3$$

$$|f(x) - g(x)| = f(x) - g(x) \Leftrightarrow f(x) - g(x) \geq 0$$

$$\Leftrightarrow x \leq 2 \quad \text{ή} \quad x \geq 3$$