

a) Πρέπει:

$$(x - 4 \geq 0 \text{ και } x + 1 \geq 0) \Leftrightarrow (x \geq 4 \text{ και } x \geq -1) \Leftrightarrow x \geq 4 \Leftrightarrow x \in [4, +\infty)$$

b) Είναι:

$$\begin{aligned} A &= (\sqrt{x-4} + \sqrt{x+1})(\sqrt{x-4} - \sqrt{x+1}) = (\sqrt{x-4})^2 - (\sqrt{x+1})^2 = \\ &= x-4 - (x+1) = x-4 - x-1 = -5 \end{aligned}$$