

$$\sqrt{\ln x} = 1 - \ln x$$

$$c.a.: \begin{cases} x > 0 \\ \ln x \geq 0 \\ 1 - \ln x \geq 0 \end{cases} \Rightarrow \begin{cases} x > 0 \\ x \geq 1 \\ x \leq e \end{cases} \Rightarrow 1 \leq x \leq e$$

pongo: $\ln x = t$

$$\sqrt{t} = 1 - t \Rightarrow t = 1 - 2t + t^2 \Rightarrow t^2 - 3t + 1 = 0$$

$$t_{1,2} = \frac{3 \pm \sqrt{9 - 4}}{2} \begin{cases} \frac{3 + \sqrt{5}}{2} \Rightarrow \ln x = \frac{3 + \sqrt{5}}{2} \text{ non acc.} \\ \frac{3 - \sqrt{5}}{2} \Rightarrow \ln x = \frac{3 - \sqrt{5}}{2} \Rightarrow \end{cases} \quad x = e^{\frac{3 - \sqrt{5}}{2}}$$