

Simultaneous surds equation

1. Solve $\begin{cases} \sqrt{\frac{x}{y}} - \sqrt{\frac{y}{x}} = \frac{7}{\sqrt{xy}} \\ \sqrt[4]{x^3y} - \sqrt[4]{xy^3} = \sqrt{12} \end{cases}$.

2. Solve $\begin{cases} \sqrt{7x+y} + \sqrt{x+y} = 6 \\ \sqrt{x+y} - y + x = 2 \end{cases}$.