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連立方程式 $\begin{cases} (\sqrt{2}+1)x + y = 2 \\ x + (\sqrt{2}+1)y = 2\sqrt{2} \end{cases}$ を解け。 〔城北〕

$(\sqrt{2}+1)x + y = 2$ の両辺に $\sqrt{2}-1$ をかけると

$x + (\sqrt{2}-1)y = 2$ となる

$\quad x + (\sqrt{2}-1)y = 2\sqrt{2}-2$

$-)\ x + (\sqrt{2}+1)y = 2\sqrt{2}$

$\quad\quad\quad -2y = -2$

$\quad\quad\quad\quad y = 1$

$x + (\sqrt{2}+1)y = 2\sqrt{2}$ の両辺に $\sqrt{2}-1$ をかけて

$\quad (\sqrt{2}-1)x + y = 4 - 2\sqrt{2}$

$-)\ (\sqrt{2}+1)x + y = 2$

$\quad\quad -2x = 2 - 2\sqrt{2}$

$\quad\quad x = \sqrt{2} - 1$

$(x, y) = (\sqrt{2}-1, 1)$