

LCD:  $5(x+2)$

$$\textcircled{6} \quad \frac{9}{5x+10} = \frac{9 \cdot 5(x+2)}{5(x+2) \cdot 1} - \frac{3 \cdot 5(x+2)}{5 \cdot 1} \quad \left. \begin{array}{l} x+2=0 \\ x \neq -2 \end{array} \right\}$$

$$\Downarrow \quad 9 = 45 - 3(x+2)$$

$$9 = 45 - 3x - 6$$

$$9 = -3x + 39$$

$$\begin{array}{r} -39 \\ -39 \end{array} \quad \begin{array}{r} -39 \\ -39 \end{array}$$

$$\begin{array}{r} -30 = -3x \\ \underline{-3} \quad \underline{-3} \end{array}$$

$$10 = x$$

$$\begin{array}{l} \cancel{x-3}=0 \text{ or } x+7=0 \\ \underline{+8+3} \quad \underline{-7-7} \\ x \neq 3 \quad x \neq -7 \end{array}$$

LCD:  $(x-3)(x+7)$

$$\textcircled{7} \quad \frac{1}{x-3} - \frac{3}{x+7} = \frac{10}{(x-3)(x+7)}$$

$$\Downarrow \quad x+7 - 3(x-3) = 10$$

$$x+7 - 3x+9 = 10$$

$$-2x + 16 = 10$$

$$\begin{array}{r} -16 \\ -16 \end{array} \quad \begin{array}{r} -16 \\ -16 \end{array}$$

$$\begin{array}{r} -2x = -6 \\ \underline{-2} \quad \underline{-2} \end{array}$$

$$x = +3$$

No Solution