Solving Equations with Variables on Both Sides

① $-4x$ ⤵ $\begin{array}{c} 4x + 12 = 7x \\ 12 = 3x \\ \underline{\quad} = x \end{array}$ ⤴ $-4x$, $\div 3$ ⤵ ⤴ $\div 3$

② $-5x$ ⤵ $\begin{array}{c} 5x + 6 = 7x \\ 6 = \underline{\quad} \\ \underline{\quad} = x \end{array}$ ⤴ $-5x$, $\div 2$ ⤵ ⤴ $\div 2$

③ $-4a$ ⤵ $\begin{array}{c} 7a = 4a + 15 \\ 3a = \underline{\quad} \\ a = \underline{\quad} \end{array}$ ⤴ $-4a$, $\div 3$ ⤵ ⤴ $\div 3$

④ $-2x$ ⤵ $\begin{array}{c} 10x = 2x + 40 \\ \underline{\quad} = 40 \\ x = \underline{\quad} \end{array}$ ⤴ $-2x$, $\div 10$ ⤵ ⤴ $\div 10$

⑤ $-3w$ ⤵ $\begin{array}{c} 3w + 14 = 5w \\ \underline{\quad} = \underline{\quad} \\ \underline{\quad} = w \end{array}$ ⤴ $-3w$

⑥ $-4m$ ⤵ $\begin{array}{c} 6m = 4m + 22 \\ \underline{\quad} = \underline{\quad} \\ m = \underline{\quad} \end{array}$ ⤴ $-4m$

⑦ $-a$ ⤵, -24 ⤵ $\begin{array}{c} 9a + 24 = a \\ \underline{\quad} + 24 = 0 \\ \underline{\quad} = \underline{\quad} \\ a = \underline{\quad} \end{array}$ ⤴ $-a$, -24

⑧ $-x$ ⤵, -12 ⤵ $\begin{array}{c} 5x + 12 = x \\ \underline{\quad} + 12 = \underline{\quad} \\ \underline{\quad} = \underline{\quad} \\ x = \underline{\quad} \end{array}$ ⤴ $-x$, -12