Simple Systems of Equations

For 1 – 6, find the (x, y) pair that makes BOTH equations true.

1) $\begin{cases} x + y = 12 \\ x - y = 2 \end{cases}$

4) $\begin{cases} y = 2x + 8 \\ y = 4x + 2 \end{cases}$

7) Try to come up with your own system of equations that would have a solution of (6, 4).

2) $\begin{cases} x + y = 25 \\ x \div y = 4 \end{cases}$

5) $\begin{cases} 3x + y = 37 \\ 4x + y = 47 \end{cases}$

3) $\begin{cases} xy = -24 \\ x + y = 5 \end{cases}$

6) $\begin{cases} \sqrt{x} = y \\ x + y = 42 \end{cases}$