# Algebra II Solving Systems of Equations - Exploration

Working with a partner, discover the solution to these equation pairs. The solution is the point (or points) that the lines have in common. Report "NO SOLUTION," if appropriate.

**2.**
$$\begin{cases} 2x - y = 3 \\ y + x = 6 \end{cases}$$

**3.**
$$\begin{cases} y - 4x = -7 \\ 5x + y = -6 \end{cases}$$

**4.**
$$\begin{cases} 5y - 5x = 10 \\ 3x + 10 = 2y \end{cases}$$

**5.**
$$\begin{cases} y = 3 - x \\ 6x + 2y = 2 \end{cases}$$

**6.**
$$\begin{cases} y + x = 5 \\ 3x - 5y = -1 \end{cases}$$

**7.**
$$\begin{cases} 3y + 6x = 3 \\ x - y = -7 \end{cases}$$

**8.**
$$\begin{cases} y - x = 0 \\ 8x + 4y = -24 \end{cases}$$

**9.**
$$\begin{cases} x - y = -1 \\ 4x - 2y = 2 \end{cases}$$
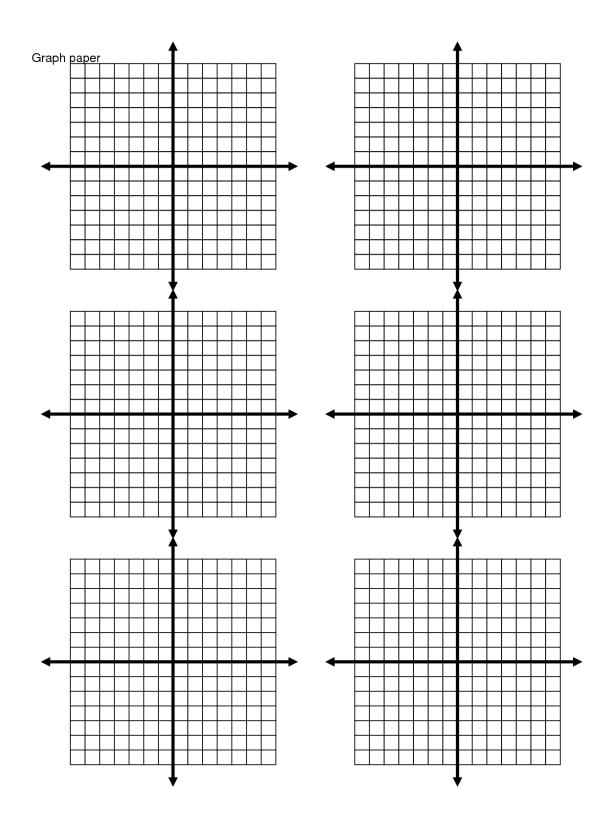
**10.**
$$\begin{cases} 7x + y = 13 \\ 28x + 4y = -12 \end{cases}$$

**11.**
$$\begin{cases} 2x - 3y = -15 \\ 3y - 2x = 15 \end{cases}$$

**12.**
$$\begin{cases} 8y - 24x = 64 \\ 9y + 45x = 72 \end{cases}$$

**13.**
$$\begin{cases} 2x + 2y = -10 \\ 4x + 4y = -16 \end{cases}$$

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Graph paper