1. Use a graph to solve the system:

   \[ y = \frac{1}{2}x + 2 \]
   \[ y = \frac{1}{2}x - 2 \]

2. Use a graph to solve the system:

   \[ y = -\frac{1}{2}x - 1 \]
   \[ -3x - 6y = 6 \]

3. Use a graph to solve the system:

   \[ x - y = 1 \]
   \[ 2x + y = -4 \]

4. Use the substitution method to solve the system:

   \[ x + y = 1 \]
   \[ x - 3y = 5 \]

5. Use the substitution method to solve the system:

   \[ 4x + 3y = 9 \]
   \[ 2x - y = 7 \]

6. Solve the system using elimination (linear combination method):

   \[ x + 3y = 8 \]
   \[ 4x - 2y = 4 \]

7. Solve the system using elimination (linear combination method):

   \[ 2x + 6y = 14 \]
   \[ 4x - 8y = 48 \]

8. Tell whether the ordered pair (1, 1) is a solution of the system:

   \[ x + y < 8 \]
   \[ 3x \leq y + 6 \]

9. Graph the system of inequalities:

   \[ 3x + y \geq -1 \]
   \[ x - y > -2 \]

10. Graph the system of inequalities:

    \[ y < |x + 1| \]
    \[ y > 3x + 4 \]

For problems 11 & 12: Solve the system of equations:

11. \[ y = 3x + 1 \]
    \[ 2x - y = 8 \]

12. \[ 8y + 10 = 6x \]
    \[ 2y - x = -3 \]

\[
\begin{bmatrix}
6 & 4 \\
-2 & -1
\end{bmatrix}, a_{21}
\]

13. \[
\begin{bmatrix}
3 & 5 & -1 \\
-2 & 9 & 0 \\
7 & 2 & 3
\end{bmatrix}
\]

14. \[
\begin{bmatrix}
-3 & -5 \\
-2 & x - 4y
\end{bmatrix} = \begin{bmatrix}
12 & 2x + 3y
\end{bmatrix}
\]

15. \[
\begin{bmatrix}
-3x & x + 2y \\
-2 & 0
\end{bmatrix}
\]

**Bonus:** A student has some $1 bills and $5 bills in his wallet. He has a total of 15 bills that are worth $47. How many of each type of bill does he have?