

PROBLEM SET 3-1
(Graphing Systems of Equations)

Solve the following systems by graphing:

1.
$$\begin{cases} y = x - 2 \\ y = -2x + 7 \end{cases}$$

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

3.
$$\begin{cases} x + 4y = 3 \\ y = -\frac{1}{4}x + \frac{3}{4} \end{cases}$$

4.
$$\begin{cases} 3x + 6y = 12 \\ x + 2y = 8 \end{cases}$$

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

6.
$$\begin{cases} x - 2y = -2 \\ 2x - 4y = 4 \end{cases}$$

Without graphing, classify each system as *independent*, *dependent* or *inconsistent*:

7.
$$\begin{cases} 3x - 2y = 8 \\ 6x - 4y = 5 \end{cases}$$

8.
$$\begin{cases} 2x + 8y = 6 \\ x + 4y = 3 \end{cases}$$

9.
$$\begin{cases} 2x + 6y = 14 \\ x - 2y = -3 \end{cases}$$

10.
$$\begin{cases} 3x + 5y = 4 \\ 3x + 5y = 6 \end{cases}$$