6-1 Solve Systems by Graphing

Solve by graphing:

1. \( y = -\frac{1}{3}x - 3 \)
   \( y = -x + 1 \)

Solution: \((-6, -5)\)  \((3)\)

2. \( -x + 3y = 9 \)
   \( 4x + 3y = -6 \)

Solution: \((-3, 2)\)  \((5)\)

3. Is \((-4, 6)\) a solution to this system?  \(3x + 4y = 12\)

Show how you know.

\[
\begin{align*}
3(-4) + 4(6) &= 12 \\
\frac{3}{2}(-4) + 4(6) &= 12 \\
-12 + 24 &= 12 \\
12 &= 12 \checkmark
\end{align*}
\]