EXAMPLE:
Draw a graph of the equation.

1) \(4x + y = -8\)

\[ y = -4x - 8 \]

\((-2, 0)\)

\(m = -4\)

\((0, -8)\)

OR

\(y\)-intercept: \((0, -8)\)

\(x\)-intercept: \((-2, 0)\)

INSTRUCTIONS:
Draw a graph of the equation.

2) \(x - 3y = -9\)

3) \(3x + 5y = -30\)

4) \(x - 7y = 21\)

5) \(2x + y = -3\)
EXAMPLE:
Draw a graph of the equation.

1) \( y + 2 = \frac{1}{4}(x + 4) \) 

\[
\begin{align*}
\text{OR} & \quad y + 2 = \frac{1}{4}(x + 4) \\
& \quad \rightarrow \quad y + 2 = \frac{1}{4}x + 1 \\
& \quad \rightarrow \quad y = \frac{1}{4}x - 1
\end{align*}
\]

INSTRUCTIONS:
Draw a graph of the equation.

2) \( y - 3 = -\frac{1}{2}(x + 4) \)

3) \( y + 5 = 5(x + 2) \)

4) \( y + 4 = -2(x - 4) \)

5) \( y + 5 = \frac{7}{5}(x + 5) \)
EXAMPLE:
Graph the line that is perpendicular to the given equation and passes through the given point.

1) through: \((-3, 4)\), perp. to \(y = \frac{1}{3}x - 5\)

INSTRUCTIONS:
Graph the line that is perpendicular to the given equation and passes through the given point.

2) through: \((1, -3)\), perp. to \(y = \frac{1}{2}x + 1\)  
3) through: \((-2, -5)\), perp. to \(y = -\frac{1}{3}x - 1\)

4) through: \((-4, 5)\), perp. to \(y = x + 5\)  
5) through: \((-2, 5)\), perp. to \(y = \frac{2}{5}x + 1\)
EXAMPLE:
Draw a graph of the equation.

1) \( y = -\frac{9}{4}x + 6 \)

INSTRUCTIONS:
Draw a graph of the equation.

2) \( y = \frac{1}{6}x + 1 \)

3) \( y = -2x \)

4) \( y = -\frac{2}{5}x - 4 \)

5) \( y = -5 \)
EXAMPLE:
Graph the line that is parallel to the given equation and passes through the given point.

1) through: $(-1, 1)$, parallel to $y = 2x - 2$

INSTRUCTIONS:
Graph the line that is parallel to the given equation and passes through the given point.

2) through: $(-2, 5)$, parallel to $y = -\frac{9}{2}x - 2$
3) through: $(-1, 2)$, parallel to $y = -x + 2$

4) through: $(-5, -2)$, parallel to $y = \frac{2}{5}x - 1$
5) through: $(-3, -5)$, parallel to $y = -4$