Name: _____

Date: _____

Learning Goal 4.2

I can graph and describe linear relations.

There are 3 ways to represent a line for graphing

- 1.
- 2.
- 3.

Example 1 Graph the following lines on the grid provided.

$$y = 3x + 2$$

$$y = \frac{1}{3}x + 2$$

$$y = -3x - 4$$

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

Example 2 Graph the following lines on the grid provided.

$$x + 4y = 8$$

$$4x + y = 8$$

$$x + 4y = 8$$
 $4x + y = 8$ $x + y = x$

$$\underline{} x + \underline{} y = \underline{}$$

Example 3 Graph the following lines on the grid provided.

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

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

$$y - 2 = -2(x - 6)$$

$$y + 2 = -2(x + 6)$$

Example 4 Graph the following lines on the grid provided.

$$y - 2 = 0$$

$$y = -2$$

$$x + 3 = 0$$

$$x = 3$$

Example _____

