

## 3.3 More Graphing: Intercepts

### Need To Know



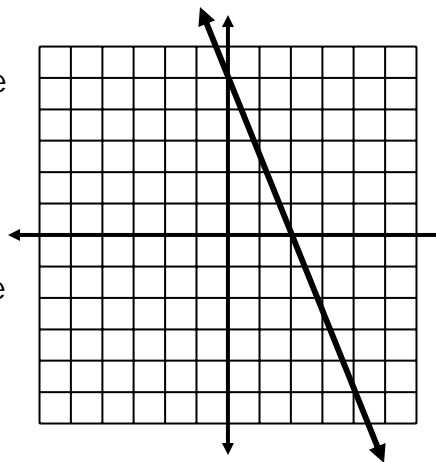
- What are the intercepts
- How to find intercepts
- How to graph with intercepts
- Graphing Special Equations

## Intercepts – What are they?

### Intercepts

The **x-intercept** of a line is the x-coordinate of the point where the point crosses the x-axis.

The **y-intercept** of a line is the y-coordinate of the point where the point crosses the y-axis.



## Intercepts - How to find them?

- The **x-intercept**

Find the intercepts for:

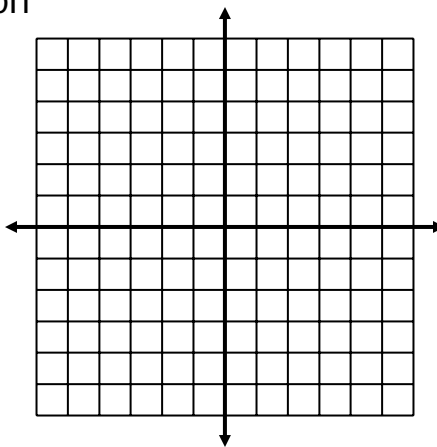
$$3x - 4y = -12$$

- The **y-intercept**

## Practice Graphing w/ Intercepts

Find the intercepts and graph

$$-2x - y = -6$$

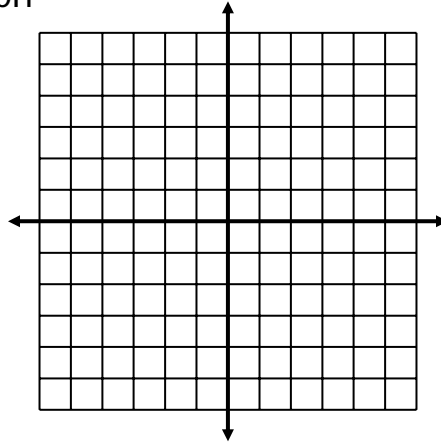




## Practice Graphing w/ Intercepts

Find the intercepts and graph

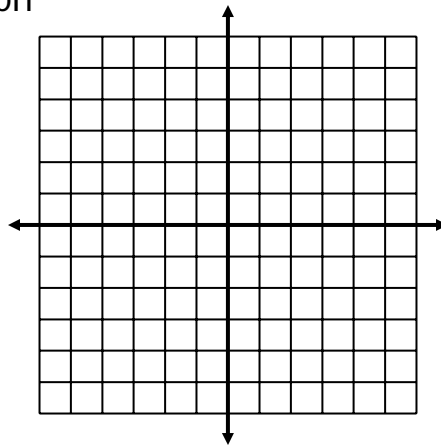
$$y = -\frac{2}{3}x - 4$$



## Practice Graphing w/ Intercepts

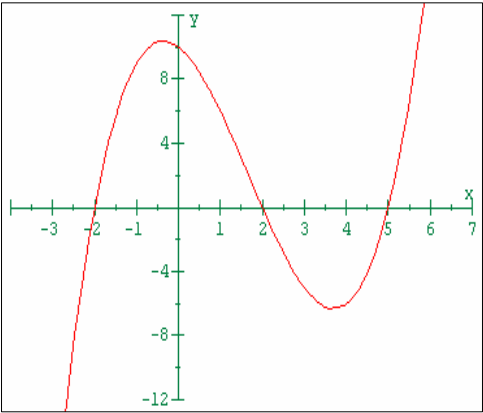
Find the intercepts and graph

$$y = \frac{1}{4}x$$



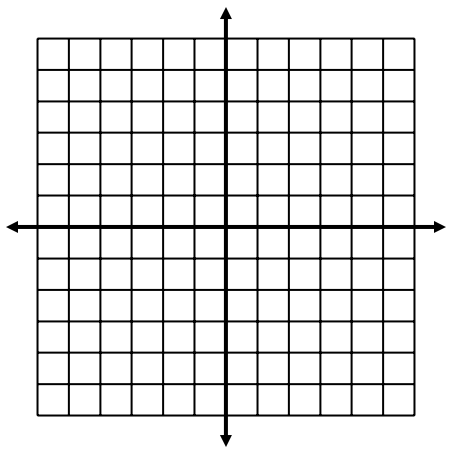
## Finding Intercepts

This is a graph of a non-linear equation. Find the intercept points.



## Graphing Special Equations

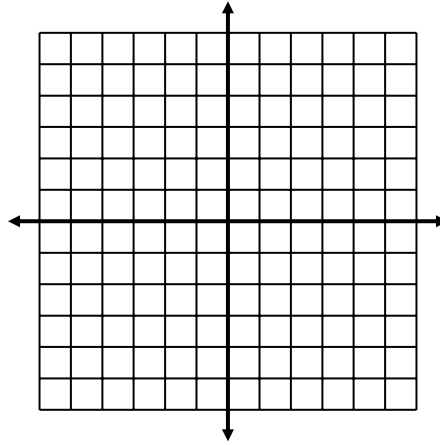
Graph the equation  $y = -2$



X	Y

## Graphing Special Equations

Graph the equation  $x = 4$



X	Y

## Conclusion

Always Remember:

$x = \text{number}$  is a vertical line

$y = \text{number}$  is a horizontal line