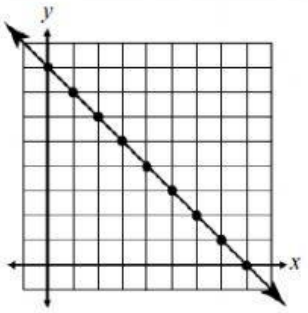
Name:	Date:
Topic:	Class:

Main Ideas/Questions	Notes/Examples

X- and Y-Intercepts

- The point at which the line intersects the x-axis is called the **x-intercept.**
- The point at which the line intersects the y-axis is called the **y-intercept.**
- **Example:** Identify the x- and y-intercept of the graph shown to the right.



Finding Intercepts Algebraically

- To find the x-intercept of an equation:

  _____

- To find the y-intercept of an equation:

  _____

- **Example:** Find the x- and y-intercept of the equation $y = 3x + 6$.

Examples

Directions: Find the x- and y-intercept of each equation.

1. $y = -x + 5$

x-int: _____

y-int: _____

2. $y = \frac{1}{2}x - 8$

x-int: _____

y-int: _____

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

x-int: _____

y-int: _____

4. $x - y = 2$

x-int: _____

y-int: _____

5. $3x - 2y = 12$

x-int: _____

y-int: _____

6. $8x + 10y = -10$

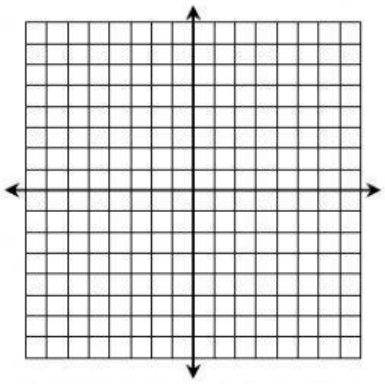
x-int: _____

y-int: _____

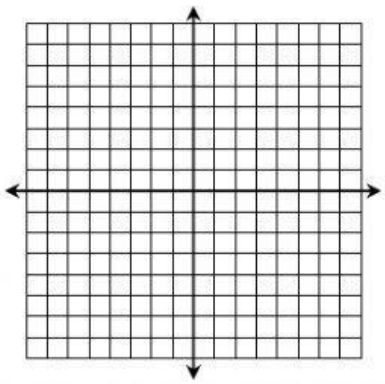
Graphing by Intercepts

Directions: Find the x- and y-intercept of each equation. Graph the equation using its intercepts.

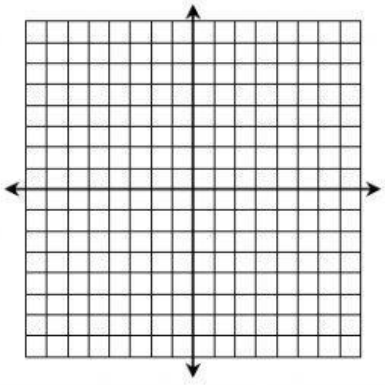
7. $x + y = 3$



8. $-4x + 5y = 20$



9. $9x - 15y = 45$



10. $2x - y = 7$