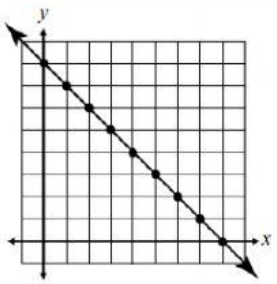
Name:	Date:
Topic:	Class:

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. $8x + 10y = -10$

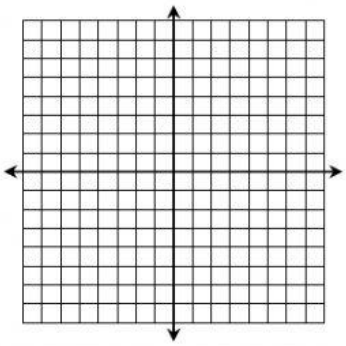
x-int: _____

y-int: _____

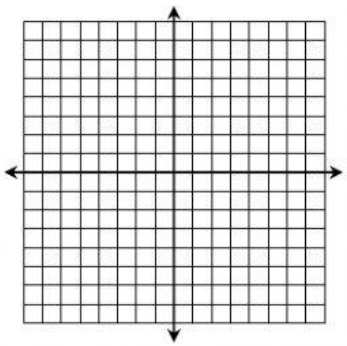
Graphing by Intercepts

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

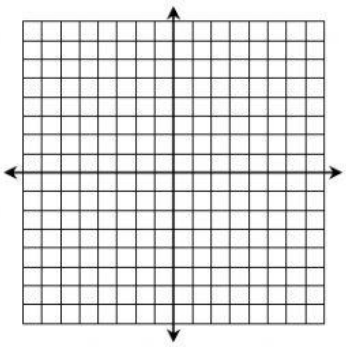
7. $x + y = 3$



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



9. $9x - 15y = 45$



10. $2x - y = 7$