

Name:

Date:

Topic:

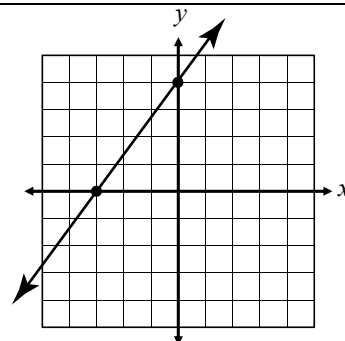
Class:

Main Ideas/Questions

Notes/Examples

X- and Y-Intercepts

- The point at which the graph intersects the x-axis is called the **x-intercept**. Likewise, the point at which the graph intersects the y-axis is called the **y-intercept**.
- Identify the x- and y-intercept of the graph shown on the right.



The **x-intercept** is also referred to as a _____, _____, or _____ to the equation.

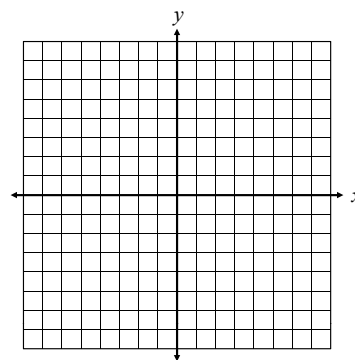
Finding Intercepts Algebraically

To find the x-intercept of an equation, set y equal to 0 and solve for x. To find the y-intercept of an equation, set x equal to 0 and solve for y. You can use these points to graph the equation.

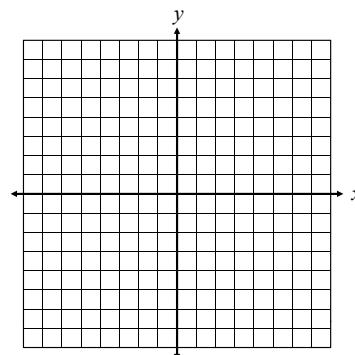
Example: Find the x- and y-intercepts of the equation $y = -2x + 5$

Directions: Find the x- and y-intercept of each equation. Then, graph the equation using the intercepts.

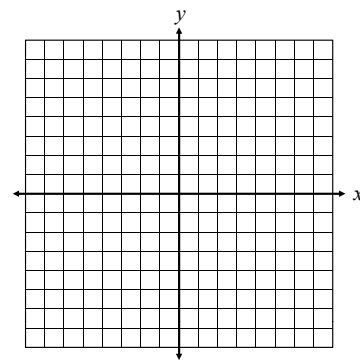
1. $y = 5x - 1$



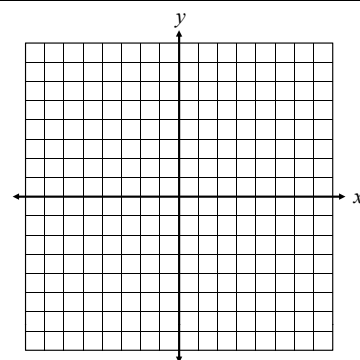
2. $y = -\frac{6}{5}x + 2$



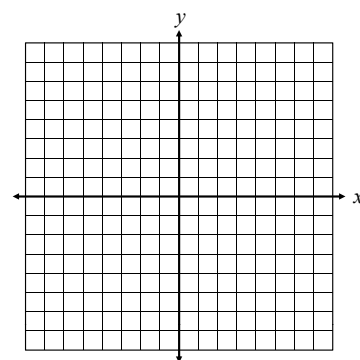
3. $y = -3x + \frac{16}{3}$



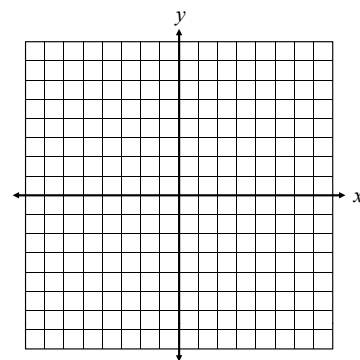
4. $4x - y = 8$



5. $-5x - 4y = -24$



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



7. $\frac{5}{2}x + \frac{5}{6}y = 6$

