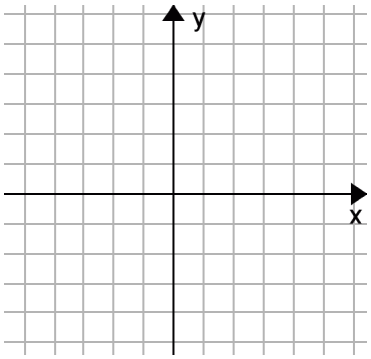
Name: Date:

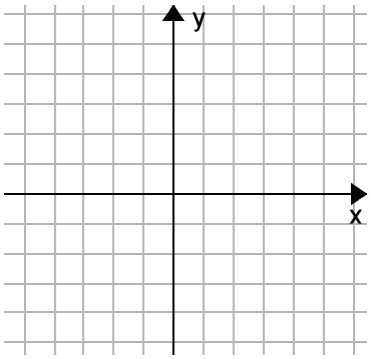
Explore Graphs of Linear Equations

1. Graph each equation.

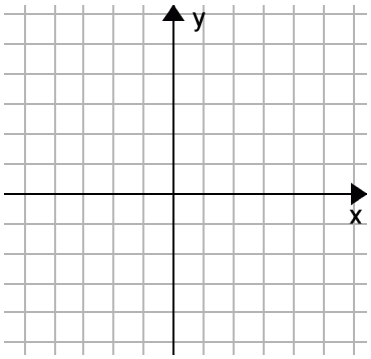
a. $2y = 2x - 4$



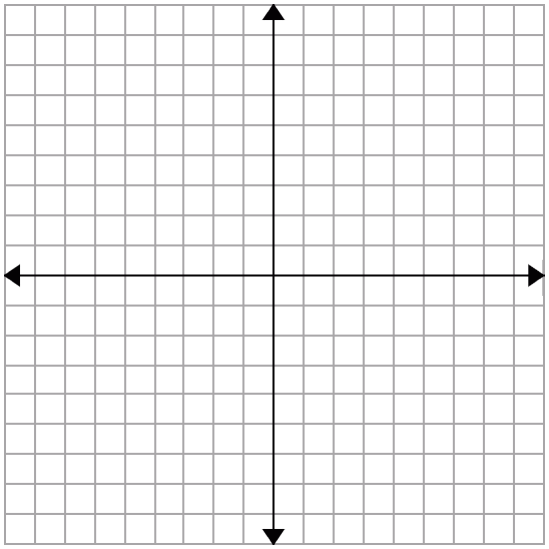
b. $-x + 4y = -3$



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



2. Graph these equations in the same coordinate plane. Also note where each of them intersects the y-axis.



a. $y = x$

b. $y = x + 1$

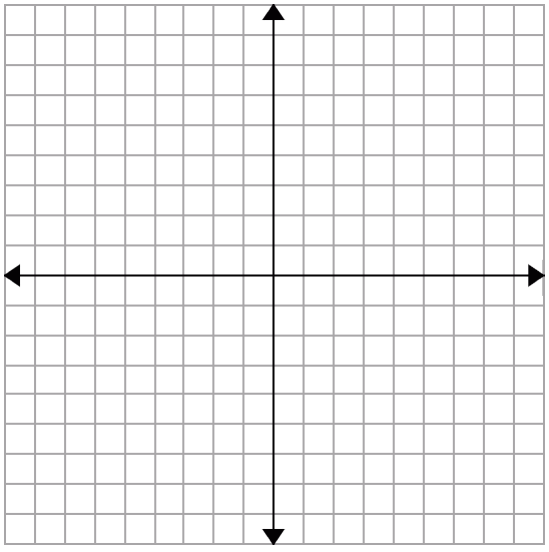
c. $y = x + 2$

d. $y = x - 1$

e. $y = x - 2$

f. Where does the graph of the equation $y = x - 12$ intersect the y-axis?

3. Graph these equations in the same coordinate plane. Also note where each of them intersects the y-axis.



a. $y = x$ and $y = -x$

b. $y = 2x$ and $y = -2x$

c. $y = 3x$ and $y = -3x$

d. $y = 4x$ and $y = -4x$

e. How is the graph of the equation $y = 10x$ related to the graph of $y = x$?

Sample worksheet from www.mathmammoth.com