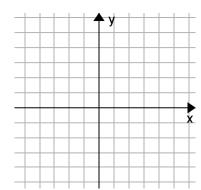
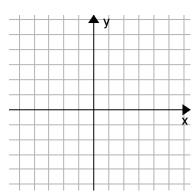
Explore Graphs of Linear Equations

1. Graph each equation.

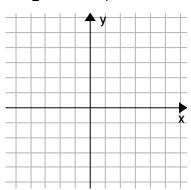
a.
$$2y = 2x - 4$$



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.

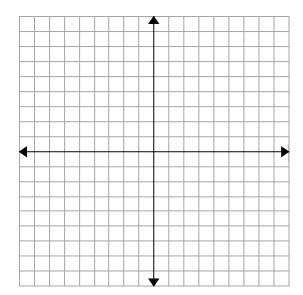
b.
$$y = x + 1$$

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?

