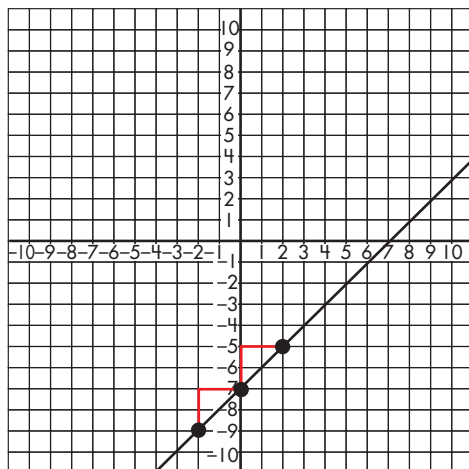


Lesson 4.9 Graphing Functions

The slope-intercept form of a linear function, $y = mx + b$, can be used to create a graph of that function.

$$y = x - 7$$



Step 1: Mark the point where the line will cross the y -axis ($b = -7$).

Step 2: From the point which crosses the y -axis, use the slope (m) to find other points on both sides. Remember that slope is found by $\frac{\text{change in } y}{\text{change in } x}$.

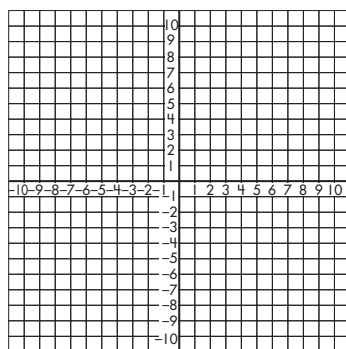
Step 3: Draw a line that goes directly through the points found.

Sketch each linear function shown.

a

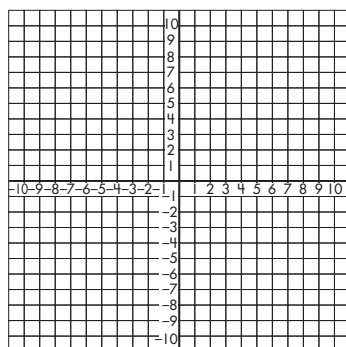
1.

$$y = -3x + 4$$



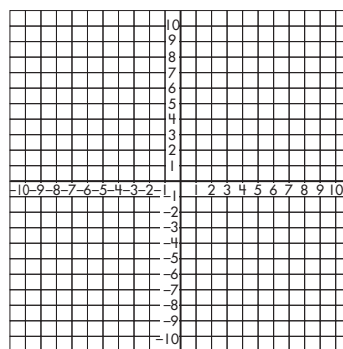
2.

$$y = 3x - 1$$



b

$$y = \frac{1}{6}x$$



$$y = 2x + 2$$

