

Name:

Date:

Topic:

Class:

Main Ideas/Questions

Notes/Examples

## Slope-Intercept Form

Linear equations are frequently written in **slope-intercept form**:

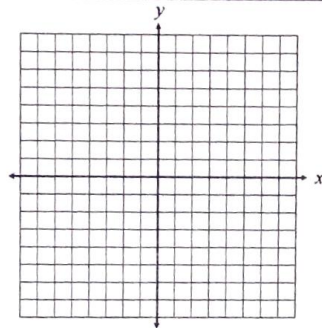
$$y = mx + b$$

## Steps to Graph

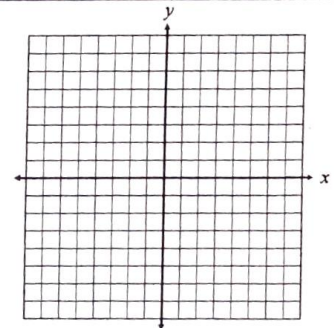
- **Step 1:** Graph the  $y$ -intercept. This is always point  $(0, b)$ .
- **Step 2:** Use the slope of the line to create more points. Remember slope is rise/run!
- **Step 3:** Use a ruler to draw a line that extends through the points, placing an arrow on both ends.

**Directions:** State the slope and  $y$ -intercept, then graph the equation.

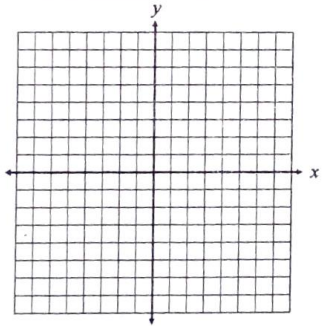
1.  $y = \frac{2}{3}x + 1$



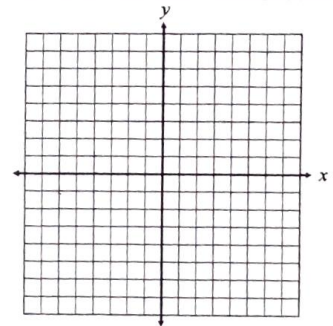
2.  $y = \frac{4}{3}x - 2$



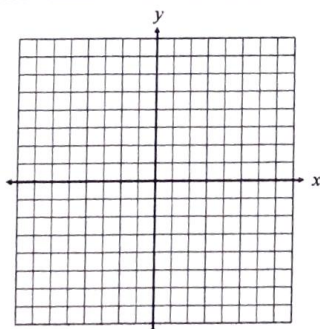
3.  $y = -\frac{1}{2}x - 4$



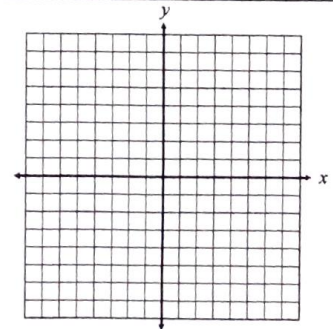
4.  $y = -3x + 7$



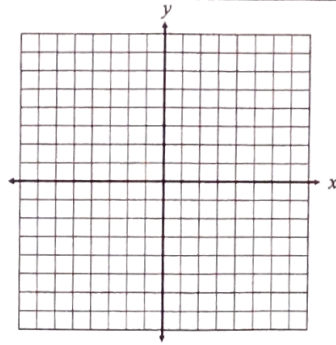
5.  $y = 2x - 5$



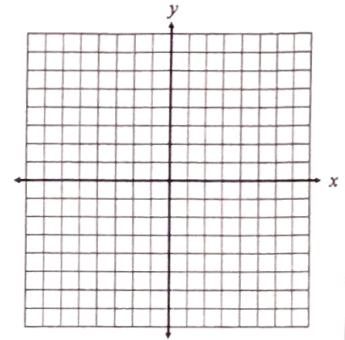
6.  $y = \frac{1}{4}x - 3$



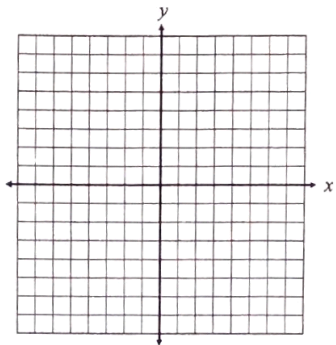
7.  $y = -5x$



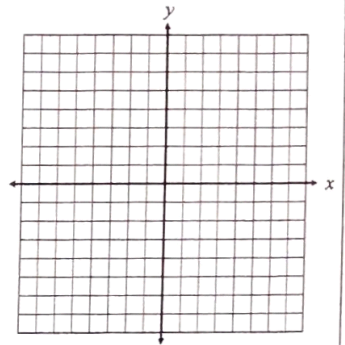
8.  $y = -x - 6$



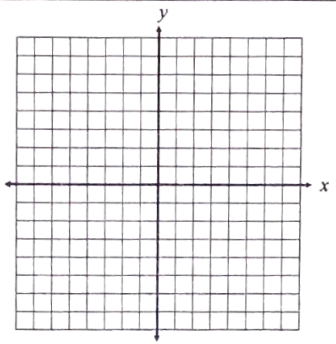
9.  $y = -\frac{7}{3}x + 3$



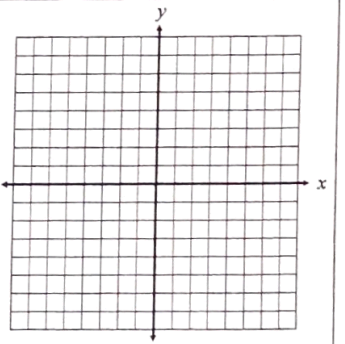
10.  $y = -2x + 7$



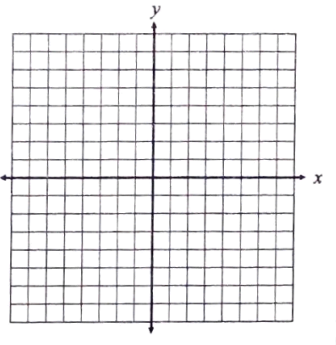
11.  $y = 6x - 1$



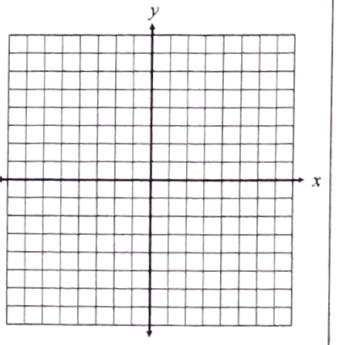
12.  $y = -\frac{2}{5}x$



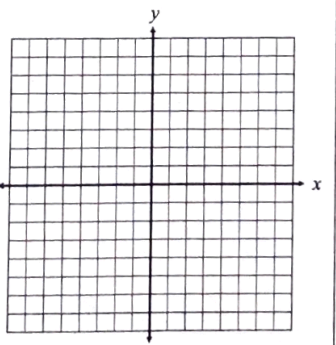
13.  $y = 5 - \frac{1}{3}x$



14.  $y = -2 + x$



15.  $y = 6 + \frac{3}{2}x$



16.  $y = 8 - \frac{7}{5}x$

