

# Write Equations in Slope-Intercept Form From Graphs

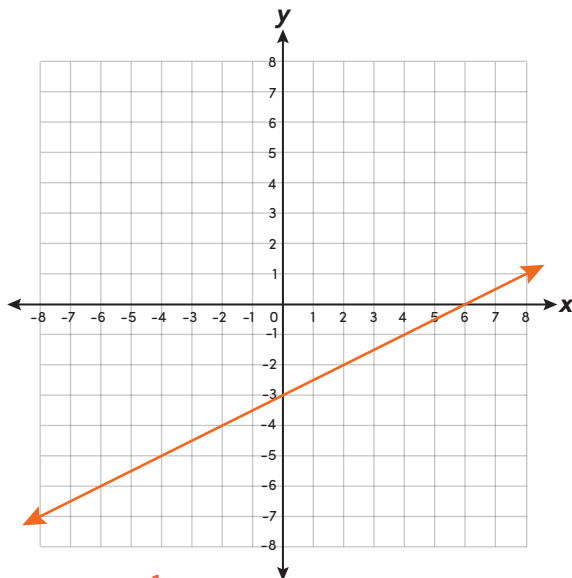
You can write the equation of a linear function in slope-intercept form, where  $m$  is the **slope** and  $b$  is the **y-intercept**:

$$y = mx + b$$

Find the **slope** and the **y-intercept** of each linear function below. Write the slope as a proper or improper fraction in simplest form or an integer. Then write the equation in slope-intercept form.

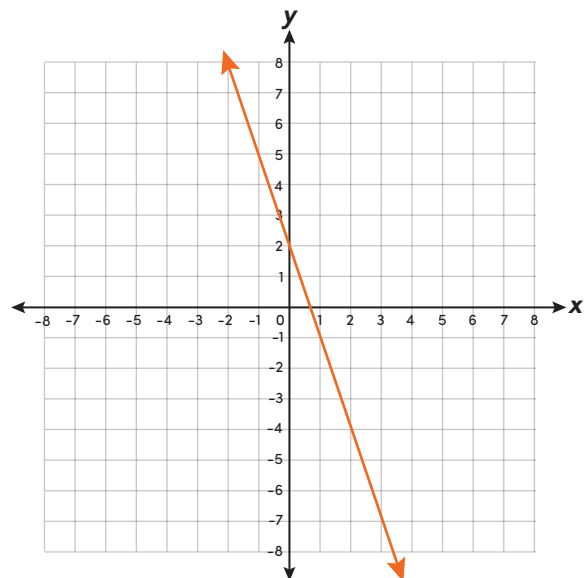


1.



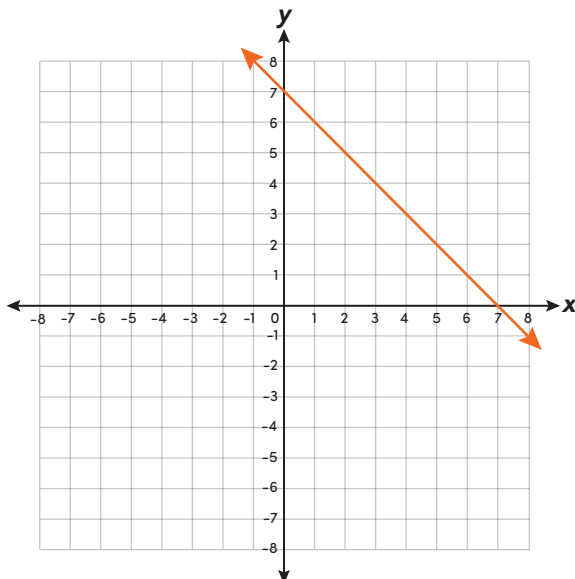
slope:  $\frac{1}{2}$       y-intercept:  $-3$   
equation:  $y = \frac{1}{2}x - 3$

2.



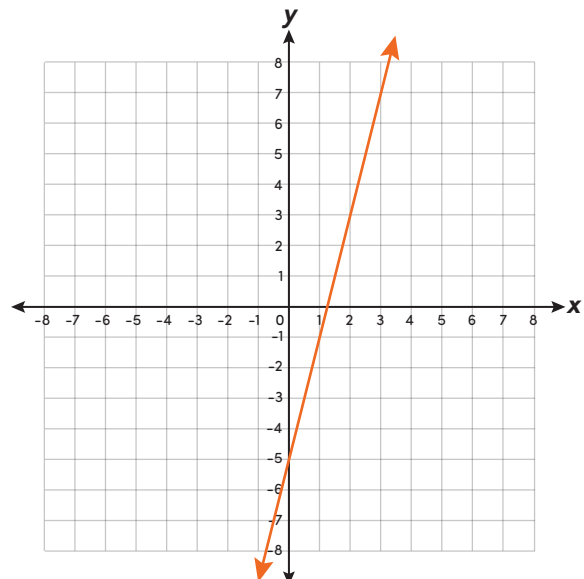
slope:  $-3$       y-intercept:  $2$   
equation:  $y = -3x + 2$

3.



slope:  $-1$       y-intercept:  $7$   
equation:  $y = -x + 7$

4.



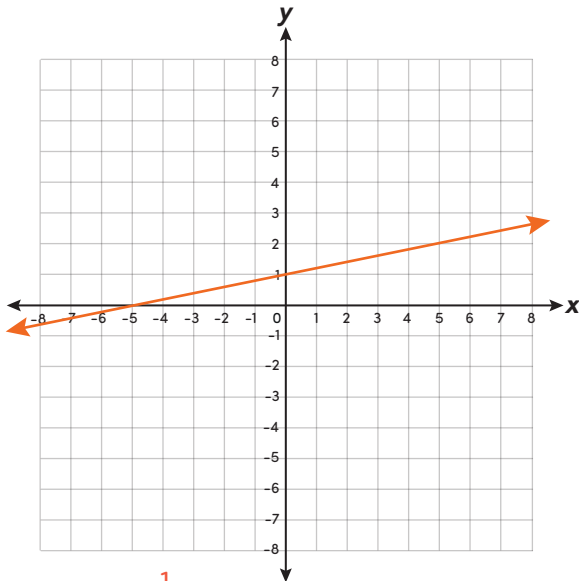
slope:  $4$       y-intercept:  $-5$   
equation:  $y = 4x - 5$

# Write Equations in Slope-Intercept Form From Graphs

Keep going! Find the **slope** and the **y-intercept** of each linear function below. Write the slope as a proper or improper fraction in simplest form or an integer. Then write the equation in slope-intercept form.

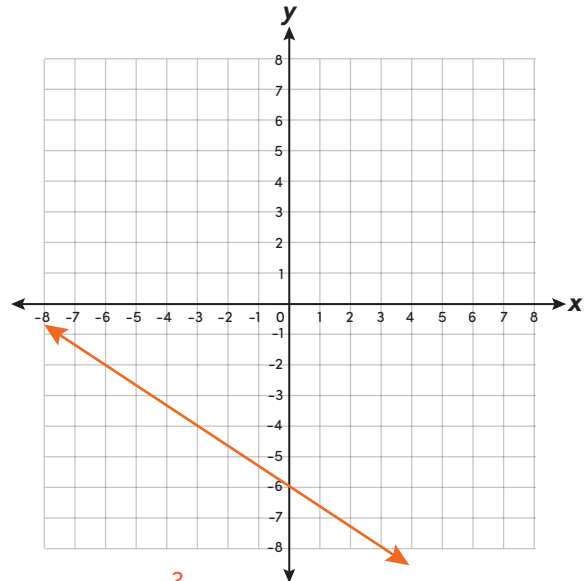


5.



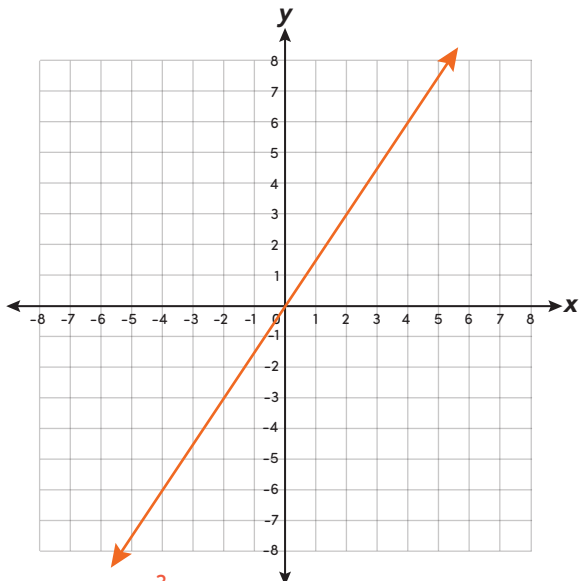
slope:  $\frac{1}{5}$       y-intercept:  $1$   
equation:  $y = \frac{1}{5}x + 1$

6.



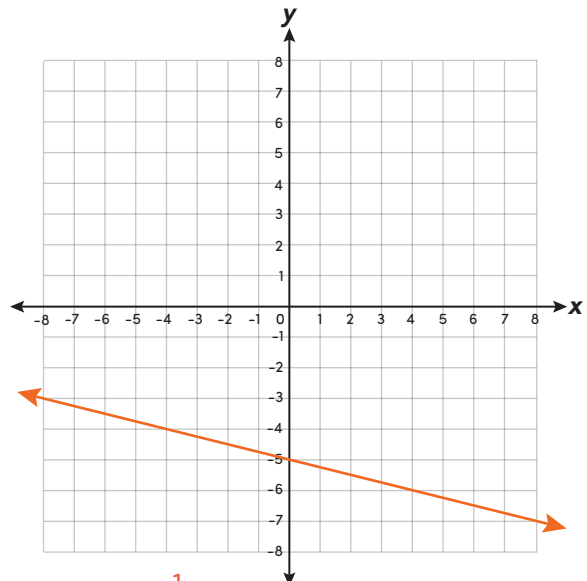
slope:  $-\frac{2}{3}$       y-intercept:  $-6$   
equation:  $y = -\frac{2}{3}x - 6$

7.



slope:  $\frac{3}{2}$       y-intercept:  $0$   
equation:  $y = \frac{3}{2}x$

8.



slope:  $-\frac{1}{4}$       y-intercept:  $-5$   
equation:  $y = -\frac{1}{4}x - 5$