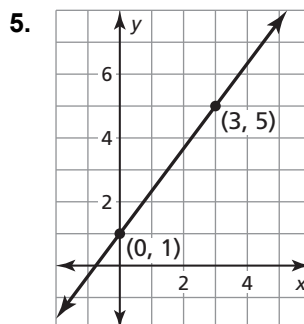
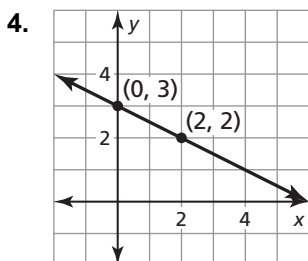


# 4.1 Practice A

In Exercises 1–3, write an equation of the line with the given slope and  $y$ -intercept.

- |                                  |                                     |                                     |
|----------------------------------|-------------------------------------|-------------------------------------|
| 1. slope: 3<br>$y$ -intercept: 8 | 2. slope: $-4$<br>$y$ -intercept: 0 | 3. slope: 0<br>$y$ -intercept: $-2$ |
|----------------------------------|-------------------------------------|-------------------------------------|

In Exercises 4 and 5, write an equation of the line in slope-intercept form.



In Exercises 6–8, write an equation of the line that passes through the given points.

- |                     |                       |                       |
|---------------------|-----------------------|-----------------------|
| 6. $(2, 3), (0, 9)$ | 7. $(5, -2), (0, -2)$ | 8. $(-1, 4), (0, -2)$ |
|---------------------|-----------------------|-----------------------|

In Exercises 9–11, write a linear function  $f$  with the given values.

- |                         |                          |                           |
|-------------------------|--------------------------|---------------------------|
| 9. $f(0) = 3, f(1) = 5$ | 10. $f(0) = 9, f(2) = 4$ | 11. $f(3) = -2, f(0) = 1$ |
|-------------------------|--------------------------|---------------------------|

12. In 2003, a gallon of gas cost \$1.75. In 2013, a gallon of gas cost \$3.50.

- Write a linear model that represents the cost (in dollars) of a gallon of gas as a function of the number of years since 2003.
- Use the model to predict the cost of a gallon of gas in 2023.

13. Line  $\ell$  is a reflection in the  $y$ -axis of line  $k$ . Write an equation that represents line  $k$ .

