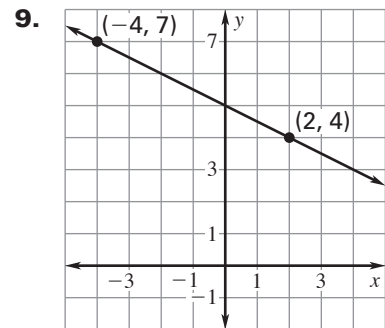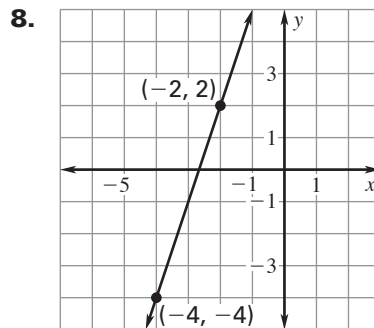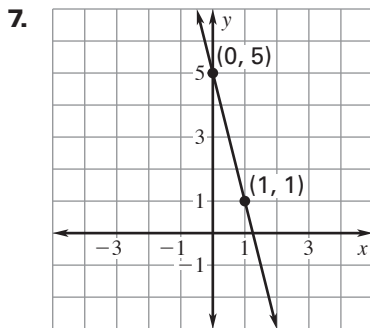**LESSON 4.2** **Practice B**
For use with the lesson "Use Linear Equations in Slope-Intercept Form"

Write an equation of the line that passes through the given point and has slope *m*.

1. $(-1, 6)$; $m = 5$ **2.** $(10, 3)$; $m = -2$ **3.** $(2, -3)$; $m = 7$

4. $(-4, -9)$; $m = 2$ **5.** $(5, -4)$; $m = \dfrac{1}{3}$ **6.** $(-8, 1)$; $m = -\dfrac{3}{4}$

Write an equation of the line shown.

7.

8.

9.

Write an equation of the line that passes through the given points.

10. $(-10, 7), (5, -3)$ **11.** $(-5, -3), (12, 17.4)$ **12.** $(-8, 84), (5, -46)$

Write an equation for the linear function *f* with the given values.

13. $f(4) = -8, f(-3) = 1$ **14.** $f(6) = -4, f(9) = -9$ **15.** $f(-1) = -6, f(4) = -14$

16. Oil Changes You are scheduled to start your job at an oil change shop 2 hours after the shop opens. Two hours after you start, a total of 11 cars have had their oil changed since the shop opened. Three hours later, a total of 14 cars have had their oil changed. At what rate are cars getting their oil changed since you started working? How many cars had their oil changed before you started work?

17. Motor Vehicle Licenses The amount of revenue brought in by states from motor vehicle licenses increased at a relatively constant rate of 499.79 million dollars per year from 1990 to 2000. In 2000, the states brought in 15,099 million dollars in revenue from motor vehicle licenses.

    a. What was the approximate revenue (in million dollars) from licenses in 1990?

    b. Write an equation that gives the revenue (in million dollars) as a function of the number of years since 1990.

    c. Find the revenue from licenses in 1999.

18. Imports The number of metric tons of fruits, nuts, and vegetables imported into the United States increased at a relatively constant rate of 437.5 thousand metric tons per year from 1990 to 2002. In 2002, about 9900.5 thousand metric tons of fruits, nuts, and vegetables were imported. Write an equation that gives the number of thousand metric tons imported as a function of the number of years since 1990. Find the year in which the number of metric tons reached 8000 thousand metric tons.

LESSON 4.2