

LESSON
7-2

Writing and Graphing Equations in the Form $y = mx + b$

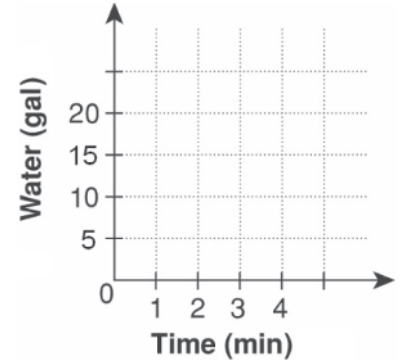
Practice and Problem Solving: A/B

Use the description below and the graph at the right for Exercises 1–4.

A tank contains 5 gallons of water. Joanna uses a hose to slowly add more water to the tank. Five gallons of water are added to the tank every minute.

- Write an equation to describe the relationship between the number of gallons in the tank and the number of minutes the tank is being filled.

- On the grid at the right, graph the linear relationship.
- Does it make sense to draw a line through the points? Explain.



- Suppose there had been no water in the tank. How would the graph change?

For Exercises 5–7, write an equation to represent the given linear relationship. Then state the meaning of the given ordered pair.

- Renting bowling shoes costs \$5. Bowling costs \$4 per game. (3, 17)

- William started with 40 photographs. He took 8 more photographs each day. (6, 88)

-

Monthly Sales	0	\$5,000	\$10,000	\$15,000	\$20,000
Earnings	\$2,000	\$2,500	\$3,000	\$3,500	\$4,000

(\$50,000, \$7,000)

