DATE

PERIOD

## Unit 5, Lesson 16 Practice Problems

- 1. Match each situation to one of the equations.
  - A. A whale was diving at a rate of 2 meters per second. How long will it take for the whale to get from the surface of the ocean to an elevation of -12 meters at that rate?
  - B. A swimmer dove below the surface of the ocean. After 2 minutes, she was 12 meters below the surface. At what rate was she diving?
  - C. The temperature was -12 degrees Celsius and rose to 2 degrees Celsius. What was the change in temperature?
  - D. The temperature was 2 degrees Celsius and fell to -12 degrees Celsius. What was the change in temperature?
- 2. Starting at noon, the temperature dropped steadily at a rate of 0.8 degrees Celsius every hour.

For each of these situations, write and solve an equation and describe what your variable represents.

- a. How many hours did it take for the temperature to decrease by 4.4 degrees Celsius?
- b. If the temperature after the 4.4 degree drop was -2.5 degrees Celsius, what was the temperature at noon?
- Kiran mixes <sup>3</sup>/<sub>4</sub> cups of raisins, 1 cup peanuts, and <sup>1</sup>/<sub>2</sub> cups of chocolate chips to make trail mix. How much of each ingredient would he need to make 10 cups of trail mix? Explain your reasoning.
- 4. Find the value of each expression.

## 1

NAME

- 1. -12 + x = 22. 2 + x = -12
- 3. -2x = -12
- 4. 2x = -12

PERIOD

a. 12 + (-10)	
b. (-5) – 6	
c. (-42) + 17	
d. 35 – (-8)	
e. $(-4\frac{1}{2}) + 3$	

NAME

5. The markings on the number line are evenly spaced. Label the other markings on the number line.



DATE

- 6. Kiran drinks 6.4 oz of milk each morning. How many days does it take him to finish a 32 oz container of milk?
  - a. Write and solve an equation for the situation.
  - b. What does the variable represent?