DATE PERIOD NAME Unit 3, Lesson 8 **Practice Problems** 1. A kangaroo hops 2 kilometers in 3 minutes. At this rate: b. How far does the kangaroo travel in 2 a. How long does it take the kangaroo to travel 5 kilometers? minutes? 2. Mai runs around a 400-meter track at a constant speed of 250 meters per minute. How many minutes does it take Mai to complete 4 laps of the track? Explain or show your reasoning. 3. At 10:00 a.m., Han and Tyler both started running toward each other from opposite ends of a 10-mile path along a river. Han runs at a pace of 12 minutes per mile. Tyler runs at a pace of 15 minutes per mile. a. How far does Han run after a half hour? After an hour?

- b. Do Han and Tyler meet on the path within 1 hour? Explain or show your reasoning.
- 4. Two skateboarders start a race at the same time. Skateboarder A travels at a steady rate of 15 feet per second. Skateboarder B travels at a steady rate of 22 feet per second. After 4 minutes, how much farther will Skateboarder B have traveled? Explain your reasoning.
- 5. There are 4 tablespoons in  $\frac{1}{4}$  cup. There are 2 cups in 1 pint. How many tablespoons are there in 1 pint? If you get stuck, consider drawing a double number line or making a table.



NAME DATE PERIOD

6. Two larger cubes are made out of unit cubes. Cube A is 2 by 2 by 2. Cube B is 4 by 4 by 4. The side length of Cube B is twice that of Cube A.

12

- a. Is the surface area of Cube B also twice that of Cube A? Explain or show your reasoning.
- b. Is the volume of Cube B also twice that of Cube A? Explain or show your reasoning.



