

Name \_\_\_\_\_

# 5-4A Lesson Master

## Questions on SPUR Objectives

See pages 320–323 for objectives.

### USES Objective F

1. The speed of light in a vacuum is 299,792,458 meters per second. In this situation, what is the meaning of the reciprocal of the given rate? \_\_\_\_\_
2. On an average day, Leo drinks 2 liters of water. Use the conversion 1 liter  $\approx$  0.26 gallons to calculate how many gallons of water Leo drinks, on average, every week. \_\_\_\_\_
3. Alexander can solve 2 long division problems in three minutes. Alexander's brother, Vladimir, is  $1\frac{1}{2}$  times as fast. How many long division problems can Vladimir solve in an hour? \_\_\_\_\_
4. Sophia can run 60 meters in ten seconds. What is her speed in kilometers per hour? \_\_\_\_\_
5. On average a human blinks 600 times in an hour. How many seconds, on average, pass between each blink? \_\_\_\_\_
6. The density of gold is 19,300 kilograms per cubic meter. This means that every cubic meter of gold weighs 19,300 kilograms. What is the volume of 7 kilograms of gold? \_\_\_\_\_
7. Huey can complete a 35-foot obstacle course with an egg balanced on his nose in two minutes. Duey is  $\frac{3}{4}$  as fast as Huey. On average, what is Duey's speed on the obstacle course? \_\_\_\_\_
8. The speedometer in Guy's car shows  $y$  miles per hour. After converting this speed into kilometers per hour, he finds that he is going  $z$  kilometers per hour. Which number is greater,  $y$  or  $z$ ? \_\_\_\_\_
9. Anna's car can be driven 44 miles per gallon of gas. If she buys gas for \$3.06 a gallon, how much will she have to pay for gas on a 500 mile trip? \_\_\_\_\_
10. A doctor instructs a patient to take  $p$  pills at regular intervals for  $n$  days. How many hours should the patient wait between each pill? \_\_\_\_\_