Name _____

5-3A Lesson Master

Questions on SPUR Objectives
See pages 320–323 for objectives.

SKILLS Objective B

In 1–3, for what value of the variable is the expression undefined?
Explain your answer.

1. $\dfrac{31z}{z-15}$ _____

2. $\dfrac{g}{g+9}$ _____

3. $\dfrac{7+2x}{5}$ _____

USES Objective E

In 4–8, calculate the rate for the given situation.

4. During a storm, $4\frac{1}{3}$ inches of rain fell in 3 hours. _____

5. On average, Emilio goes through four pencils every three weeks. _____

6. During a meteor shower, 87 meteors were seen in a 28-minute period. _____

7. The airplane descended 120 feet in 20 seconds. _____

8. A 2005 census estimated the population of Texas to be 22,859,968. The area of Texas is 261,797 square miles. Give two rates suggested by this information. _____

9. One year, 3,125 babies were born in a small city, out of which 38 were named Eric. Which of the two rates suggested by this information describes how common the name Eric was that year? _____

10. Which is a faster rate of speed: running 320 meters in 40 seconds or running 450 meters in 55 seconds? _____

11. Trent has a choice between buying a 0.5 gallon bottle of milk for $2.45 or a 1.5 gallon bottle of milk for $3. Which of the two options is more cost effective? _____

12. Edith is studying the history of the kings of Sweden. It took her three hours to look up the history of the first 24 kings. If she continues her research at the same pace, how long will it take her to look up all 71 kings of Sweden? _____