**Chapter 4 Study guide**

**Estimate each product.**

**1.**  × 39

**2.**  ×

**3.** The average population of a certain city is 4 million people. Suppose each person produces an average of 2 pounds of garbage each day. About how much garbage would be produced each day?

**Multiply. Write in simplest form.**

**4.** 8 ×

**5.**  ×

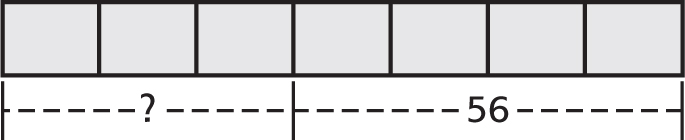
**6.**  × 2

**7.** A container holds gallon of oil. Jonathan is changing the oil on his car and needs 5 containers. How many gallons of oil does Jonathan need?

**8.** Renee spent of the day landscaping around the house. She spent of that time pulling weeds. What fraction of the day did Renee spend pulling weeds?

**9.** A recipe make 5 dozen cookies. Marquis needs to make 3 times this amount. How many dozens of cookies will he make?

**10.** Use the *draw a diagram* strategy to solve. Elvin read of the pages in his book. He has 56 pages left to read. How many pages has he read already?



**1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Divide. Write in simplest form.**

**11.** 5 ÷

**12.** ÷

**13.**  ÷

**14.** ÷

**Solve each problem. Write in simplest form.**

**15.** Spencer spent 4 hours doing chores over the weekend. If he spent of an hour for each chore, how many chores did he do?

**16.** Duane bought 68 inches of chain for an art project. How many 15-inch chains can he make from it?

**17.** Mrs. Franks has 45 pounds of grain to divide among the farm animals. If each animal receives pound of grain for each feeding, how many times can Mrs. Franks feed her animals?

**18.** Mr. Godfrey is making his famous pasta salad. The recipe calls for 1 cups of Italian dressing, 4 cups of pasta, of a cup of chopped peppers and of a cup of cubed cheddar cheese.

1. He wants to make 5 batches of his pasta salad for the game on Sunday, how much of each ingredient will he need?
2. If he has 4 cups of Italian dressing, 9 cups of pasta, 2 cups of chopped peppers and 2 cups of cheese, how many **full** batches of pasta salad can he make?
3. Which ingredient will he run out of first in the problem above? How did you figure that out?

**11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**14. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**15. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**16. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**17. \_\_\_\_\_\_\_\_\_\_\_\_\_\_**