

## Lesson 16 Practice Problems

1. A teacher is making gift bags. Each bag is to be filled with pencils and stickers. The teacher has 24 pencils and 36 stickers to use. Each bag will have the same number of each item, with no items left over. For example, she could make 2 bags with 12 pencils and 18 stickers each.

What are the other possibilities? Explain or show your reasoning.

2.
  - a. List all the factors of 42.
  - b. What is the greatest common factor of 42 and 15?
  - c. What is the greatest common factor of 42 and 50?
3. A school chorus has 90 sixth-grade students and 75 seventh-grade students. The music director wants to make groups of performers, with the same combination of sixth- and seventh-grade students in each group. She wants to form as many groups as possible.
  - a. What is the largest number of groups that could be formed? Explain or show your reasoning.
  - b. If that many groups are formed, how many students of each grade level would be in each group?

4. Here are some bank transactions from a bank account last week. Which transactions represent negative values?

Monday: \$650 paycheck deposited

Tuesday: \$40 withdrawal from the ATM at the gas pump

Wednesday: \$20 credit for returned merchandise

Thursday: \$125 deducted for cell phone charges

Friday: \$45 check written to pay for book order

Saturday: \$80 withdrawal for weekend spending money

Sunday: \$10 cash-back reward deposited from a credit card company

(From Unit 7, Lesson 13.)

5. Find the quotients.

a.  $\frac{1}{7} \div \frac{1}{8}$

b.  $\frac{12}{5} \div \frac{6}{5}$

c.  $\frac{1}{10} \div 10$

d.  $\frac{9}{10} \div \frac{10}{9}$

(From Unit 4, Lesson 11.)

6. An elephant can travel at a constant speed of 25 miles per hour, while a giraffe can travel at a constant speed of 16 miles in  $\frac{1}{2}$  hour.

a. Which animal runs faster? Explain your reasoning.

b. How far can each animal run in 3 hours?

(From Unit 2, Lesson 9.)