## Assignment

# LESSON 2: Searching for Common Ground

#### Write

Select the word that makes the following statement true. Then, use complete sentences to explain your choice.

The LCM of two numbers is (always, sometimes, never) the product of the two numbers.

### Remember

You can decompose numbers into a product of their prime factors. You can compose numbers into multiples. You can relate numbers using their greatest common factor and their least common multiple.

#### **Practice**

1. Construct a factor tree and write the prime factorization for each number. a. 70 b. 90



Consider the numbers 18 and 30.
a. List all of the factors of 18.

b. List all of the factors of 30.

c. What factors do 18 and 30 have in common?

d. What is the greatest common factor of 18 and 30?

3. Consider the numbers 54 and 72.

a. Create a table of prime factors of 54 and 72.

b. Identify the common factors of 54 and 72.

c. Identify the greatest common factor of 54 and 72.

4. For each pair of numbers, determine the least common multiple and at least one other common multiple.a. 3 and 5b. 4 and 6c. 8 and 12

#### Stretch

Determine the LCM or GCF for each.	
1. LCM(4, 8, 14)	2. LCM(9, 15, 18)

3. GCF(8, 27, 35)

4. GCF(20, 90, 50)

#### Review

Use the Distributive Property to write an equivalent addition expression for each.

1. 6(9 + 1)

2. (14 + 3)7

3.  $\frac{1}{2}(7 + 10)$ 

Decompose each rectangle into two smaller rectangles to demonstrate the Distributive Property. Then write each in the form a(b + c) = ab + ac.

