

Lesson 1 Reteach

Factors and Multiples

The **greatest common factor (GCF)** of two or more numbers is the greatest of the common factors of the numbers. The smallest number that is a multiple of two or more whole numbers is the **least common multiple (LCM)** of the numbers.

Example 1

Find the GCF of 12 and 30.

Make an organized list of the factors for each number.

Factors of 12: 1, 2, 3, 4, 6, 12

Factors of 30: 1, 2, 3, 5, 6, 10, 15, 30.

The common factors are 1, 2, 3, and 6. The greatest is 6.

So, the GCF of 12 and 30 is 6.

Example 2

Find the LCM of 6 and 15.

List the multiples of each number.

Multiples of 6: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, ...

Multiples of 15: 15, 30, 45, 60, ...

Notice that 30 and 60 are common multiples.

The least common multiple of 6 and 15 is 30.

Exercises

Find the GCF of each set of numbers.

1. 6, 12 6

2. 28, 42 14

3. 44, 55 11

4. 35, 20, 15 5

Find the LCM of each set of numbers.

5. 5, 6 30

6. 6, 8 24

7. 4, 10 20

8. 15, 12 60