Problem-Solving Strategy:
Use Logical Reasoning

Read It  Look for information.
The LCM of two unknown numbers is 42. The GCF of the numbers is 2.
One number is 8 more than the other. What are the numbers?

Organize It  Here is a way to organize the information.

Use what you know.
• The LCM of the numbers is 42.
• The GCF of the numbers is 2.
• One number is 8 more than the other.

Solve It  Use logical thinking to solve the problem.

1. Write all the factors of 42.
   1, 2, 3, 6, 7, 14, 21, 42

2. One number must be 8 greater than the other.
   14 is 8 more than 6.

3. Test the factor pairs.
   The GCF of 6 and 14 is 2. The LCM of 6 and 14 is 42.

The numbers are 6 and 14.

Try This!  Use logical thinking. Solve.

1. The LCM of two numbers is 60. The GCF of the numbers is 5.
   One number is 5 more than the other.

   The numbers are _______ and _______.

2. The LCM of two numbers is 36. The GCF is 6.
   One number is 6 more than the other.

   The numbers are _______ and _______.

Show Your Work