Name Date Time

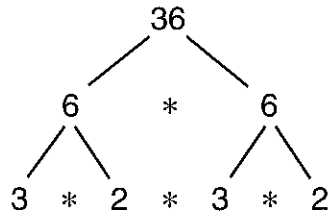
LESSON 1•9

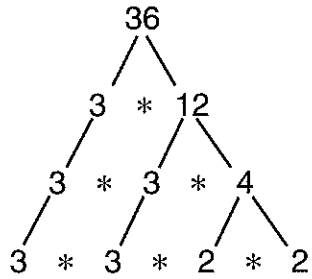
Using Factor Trees

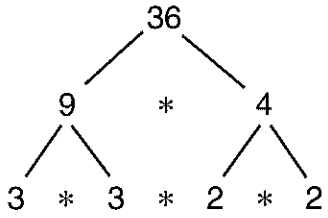
Factor Trees

One way to find all the prime factors of a number is to make a **factor tree.** First write the number. Then, underneath, write any two factors whose product is that number. Then write factors of each of these factors. Continue until all the factors are prime numbers.

Below are three factor trees for 36.







It does not matter which two factors you begin with. You always end with the same prime factors—for 36, they are 2, 2, 3, and 3. The **prime factorization** of 36 is 2 * 2 * 3 * 3.

Make a factor tree for each number. Then write the prime factorization for each number.

24

24 = _____

48

48 = _____

50

50 = _____

100

100 = _____

Copyright © Wright Group/McGraw-Hill