1–2 Prime Factors

MAIN IDEA

- Find the prime factorization of a composite number.

BUILD YOUR VOCABULARY (pages 2–3)

When two or more numbers are _____, each number is called a **factor** of the product.

A whole number that has exactly two unique factors, _____ and the number _____, is a **prime number**.

A number greater than 1 with _____ two factors is a **composite number**.

EXAMPLES Identify Prime and Composite Numbers

Tell whether each number is *prime, composite,* or *neither*.

WRITE IT

Explain why zero is neither prime nor composite. Give examples that show why.

_____

_____

_____

_____

_____

1 **13**

The factors of 13 are _____.

Since there are _____ two factors, 1 and the number itself, 13 is a _____ number.

2 **20**

The factors of 20 are _____.

Since 20 has _____ two factors, it is a _____ number.

Check Your Progress **Tell whether each number is *prime, composite,* or *neither*.**

a. 35 _____

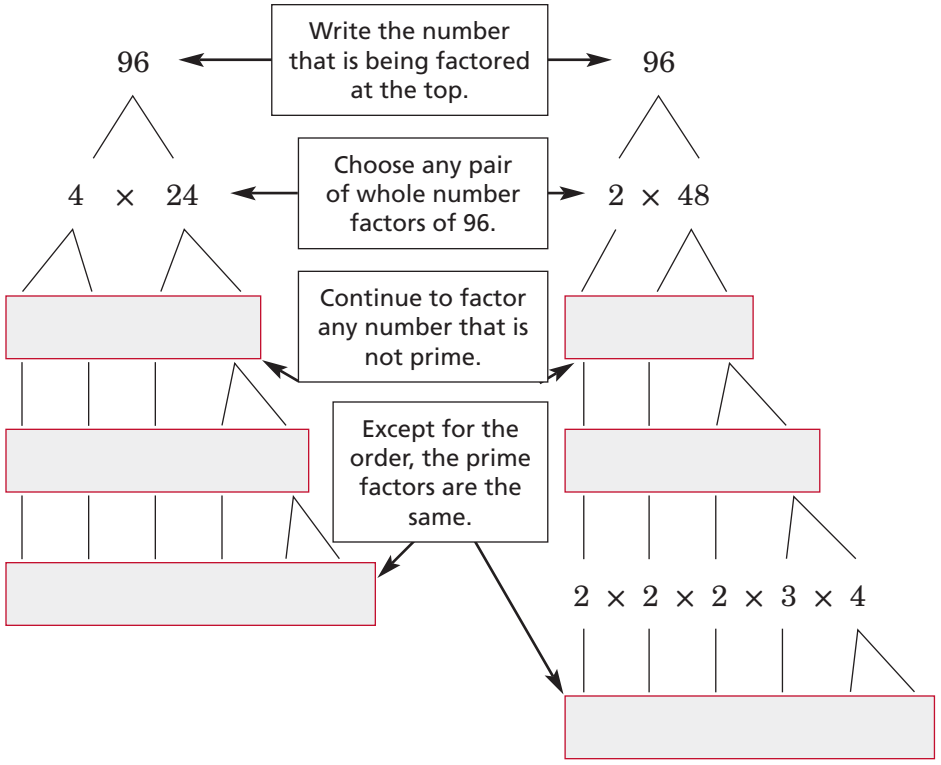
b. 41 _____

BUILD YOUR VOCABULARY (pages 2–3)

Every _____ number can be expressed as a _____ of _____ numbers. This is called a **prime factorization** of the number.

EXAMPLE **Find Prime Factorization**

1 **Find the prime factorization of 96.**

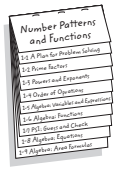


Check Your Progress Find the prime factorization of 72.

FOLDABLES

ORGANIZE IT

On the Lesson 1-2 tab, list examples of prime and composite numbers. Then show how to find the prime factorization of a few of the composite numbers.



HOMEWORK ASSIGNMENT

Page(s):

Exercises: