REVIEW: Factors of Whole Numbers

Name	

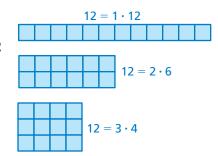
Key Concept and Vocabulary -

Factors of 12: 1, 2, 3, 4, 6, 12
Factors of 18: 1, 2, 3, 6, 9, 18

Greatest Common Factor

Visual Model

There are 3 ways to factor 12 into 2 whole numbers. Each way is represented by a rectangle.



Skill Examples

1. Factors of 1: 1

2. Factors of 8: 1, 2, 4, 8

3. Factors of 7: 1, 7

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

5. Factors of 33: 1, 3, 11, 33

Application Example

6. What is the greatest number of people with whom 20 pennies and 24 dimes can be shared so that each person gets the same share?

The greatest common factor (GCF) of 20 and 24 is 4.

• The greatest number is 4 people.

PRACTICE MAKES PURR-FECT

Check your answers at BigIdeasMath.com. —

List all factors of both numbers. Then circle the greatest common factor.

- **7.** Factors of 6: ______ Factors of 9: _____
- **9.** Factors of 20: ______ Factors of 30: ______
- **11.** Factors of 34: ______ Factors of 51: _____
- **8.** Factors of 8: ______ Factors of 16: _____
- **10.** Factors of 75: ______ Factors of 100: _____
- **12.** Factors of 10: ______ Factors of 18: _____
- **13.** Sketch all possible ways that 16 small squares can be arranged to form a rectangle.
- **14. SHARING COINS** What is the greatest number of people with whom 30 nickels and 36 dimes can be shared so that each person gets the same share? _____
- **15. DECK OF CARDS** A deck of cards has 52 cards. The deck can be divided into 4 piles of exactly 13 cards each. Describe all the other ways the deck can be divided into equal piles.