

Challenge Problems

4.4

NAME _____

Module 4 Fractions, Decimals, Percents, and Factors
Lesson 4 Prime Factorization, GCF, and LCM

Set 1

- 1 Johnny found the LCM of 8, 16, and 20 by listing the multiples of 16 and 20 only. Explain why Johnny does not have to list the multiples of eight.

Set 2

- 1 When is the LCM of two numbers the same as one of the numbers? Use prime factorization to explain the answer.
- 2 When is the LCM of two numbers the product of the two numbers? Use prime factorization to explain the answer.

Set 3

- 1 Explain how to find the LCM of three numbers using prime factorization.
- 2 Explain how to find the GCF of three numbers using prime factorization.
- 3 Explain when the GCF would be needed to solve a word problem.

Additional Work Area