

SECTION 3.1

Least Common Multiple and Greatest Common Factor

I. OBJECTIVES

At the conclusion of this lesson you should be able to:

1. Find the Least Common Multiple (LCM).
2. Find the Greatest Common Factor (GCF).
3. Solve applications.

II. PROCEDURE

Put DVD 5 in and go to Section 3.1. While watching the DVD, follow this study guide and take notes in the study guide as if you were sitting in a classroom. Stop or pause the DVD as needed to catch up or copy something down.

Multiples

Multiples of 6

Multiples of 8

Multiples of 6 = _____

Multiples of 8 = _____

What is the Least Common Multiple of 6 and 8? _____

What is the meant by Least Common Multiple? _____

How do we abbreviate Least Common Multiple? _____

The LCM of 6 and 8 is _____ .

Find the LCM of 12 and 18.

12

18

The LCM of 12 and 18 is _____ .

What is a prime number? _____

12

18

12 = _____

18 = _____

LCM = _____ = _____ = _____

Find the LCM of 18, 24, and 40

What do I do first? _____

18

24

40

18 = _____ 24 = _____ 40 = _____

LCM = _____ = _____ = _____

What does LCM mean? _____

Find the LCM of 24, 42, and 18.

24

42

18

24 = _____ 42 = _____ 18 = _____

LCM = _____ = _____ = _____

Greatest Common Factor

Factors of 12 = _____

Factors of 42 = _____

What is the Greatest Common Factor of 12 and 42? _____

What do we mean by the Greatest Common Factor? _____

How do we abbreviate Greatest Common Factor? _____

Find the GCF of 16, 24, and 56.

16 = _____

24 = _____

56 = _____

GCF = _____

Find the GCF of 16, 24, and 56.

16

24

56

$$16 = \underline{\hspace{2cm}} \quad 24 = \underline{\hspace{2cm}} \quad 56 = \underline{\hspace{2cm}}$$

$$\text{GCF} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Find the GCF 75, 225, and 60.

75

225

60

$$75 = \underline{\hspace{2cm}} \quad 225 = \underline{\hspace{2cm}} \quad 60 = \underline{\hspace{2cm}}$$

$$\text{GCF} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Find the LCM and GCF of 12, 18, and 24.

12

18

24

$$12 = \underline{\hspace{2cm}} \quad 18 = \underline{\hspace{2cm}} \quad 24 = \underline{\hspace{2cm}}$$

$$\text{LCM} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\text{GCF} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Find the LCM and GCF of 16, 64, and 72.

16

64

72

$$16 = \underline{\hspace{2cm}} \quad 64 = \underline{\hspace{2cm}} \quad 72 = \underline{\hspace{2cm}}$$

$$\text{LCM} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\text{GCF} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

III. HOMEWORK

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