

# 4.2 Greatest Common Factor

*I can find the greatest common factor of two numbers.*

## **Option One:**

Watch the videos, take notes on the handout, and complete your practice homework.

1. Watch the 2 videos and take notes on the note sheet.
  - a. <http://www.virtualnerd.com/middle-math/number-theory-fractions/greatest-common-factor/greatest-common-factor-definition>
  - b. [https://learnzillion.com/lesson\\_plans/7052-find-the-greatest-common-factor-of-two-numbers](https://learnzillion.com/lesson_plans/7052-find-the-greatest-common-factor-of-two-numbers)
2. You will hand in your notes with your homework.

## **Option Two:**

Teacher led explanation and take notes.

1. Teacher will teach lesson and you will take notes.
2. You will hand in your notes with your homework.

# Option One Note Sheet:

Name: \_\_\_\_\_

## Video 1:

<http://www.virtualnerd.com/middle-math/number-theory-fractions/greatest-common-factor/greatest-common-factor-definition>

What is a factor? \_\_\_\_\_

Factors of 16:	Factors of 18:
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What are the common factors of 16 and 18? \_\_\_\_\_.

Which is the GCF (greatest common factor) of 16 and 18? \_\_\_\_\_.

The Greatest Common Factor (GCF) is the \_\_\_\_\_ shared \_\_\_\_\_ between  
\_\_\_\_\_ or more \_\_\_\_\_.

Factors of 24:	Factors of 18:
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What are the common (shared) factors of 24 and 18? \_\_\_\_\_.

Which of the common factors is the GREATEST common factor for 24 and 18? \_\_\_\_\_.

Factors of 9:	Factors of 20:
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Common (shared) factors of 9 and 20? \_\_\_\_\_.

GCF (greatest common factor) of 9 and 20? \_\_\_\_\_.

Video 2: [https://learnzillion.com/lesson\\_plans/7052-find-the-greatest-common-factor-of-two-numbers#](https://learnzillion.com/lesson_plans/7052-find-the-greatest-common-factor-of-two-numbers#)

A prime numbers have \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

Example of a prime number:

Composite numbers have \_\_\_\_\_.

*How do you find the GCF of 32 and 60?*

1 - List the factors for 32:

2 - List the factors for 60:

3 - Compare the lists. Which factors do both 32 and 60 have in common?

4 - Which of the common factors is the largest?

*Another example:*

What is the GCF for 12, 14, and 20? \_\_\_\_\_.