

Module 1 Lesson 3

I will be able to find the factors of a number and identify the GCF of a pair of numbers

Factor-

The number you multiply to get a product

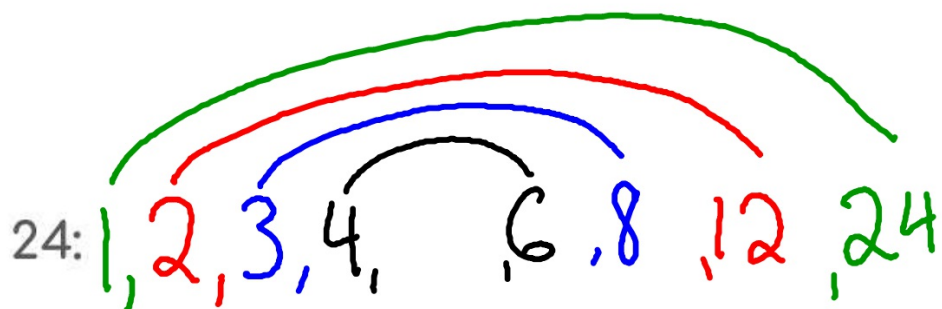
Factors are FEW

Example:

7 is a factor of 14

$$\textcircled{7} \times \textcircled{2} = 14$$

Method 1: Factor Rainbow



Method 2: Factor T-Chart

36:

	36
1	36
2	18
3	12
4	9
6	6

Greatest Common Factor - biggest factor they all have
(GCF)

<u>Greatest</u>	<u>Common</u>	<u>Factor</u>
biggest/ largest	<ul style="list-style-type: none">• used alot• All having	<ul style="list-style-type: none">• # that multiply to get a product

Find the Greatest Common Factor

12 and 66

12: 1, 2, 3, 4, 6, 12

66: 1, 2, 3, 6, 11, 22, 33, 66

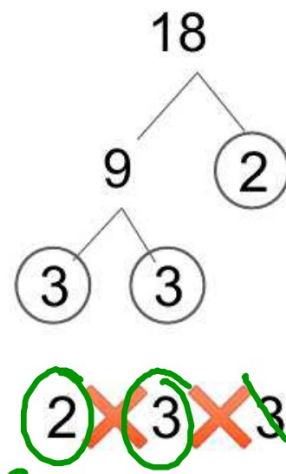
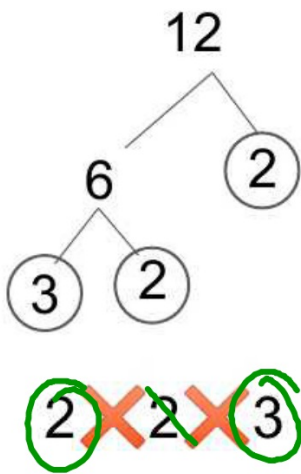
GCF of 12 and 66 = 6

GCF of 18 and 30 = 6

18 and 30

18
1 | 18
2 | 9
3 | 6

30
1 | 30
2 | 15
3 | 10
5 | 6



$$2 \times 3 = 6$$

GCF = 6 because ~~2~~ ~~3~~

Try IT

$$2 \times 2 \times 2 \times 2 \times 2$$

32

32 and 44

$$2 \times 2 \times 11$$

44

$$2 \times 22$$

$$2 \times 11$$

$$2 \times 2 = 4$$

$$16 \times 2$$

$$8 \times 2$$

$$4 \times 2$$

GCF of 32 + 44 = 4

(GCF = 4)

Finding the GCF

Method 1: List Factors

1. List out all of the factors of all numbers either using Rainbow or T-Chart
2. Find the biggest factor that both numbers have in common

Method 2: Prime Factorization

1. Find the Prime Factorization of all numbers
2. Circle all of the factors that they have in **COMMON**
3. Multiply all of the numbers that they have in common