Fractions

Finding factors

There are 2 methods of finding a number's factors:

Number

20

Technique #1

Find all the numbers that you can multiply to get 24 and put them in order from least to greatest:

1 x 20= 20

2 x 10= 20

~~3 x ?=~~ (This cannot work so it's not a factor)

4 x 5=20

~~5 x 4 = 20~~ (When factors are the same or when they repeat- you are done!)

Technique #2

Divide by numbers to get a whole number answer:

20 ÷ 1 =20

20 ÷ 2 =10

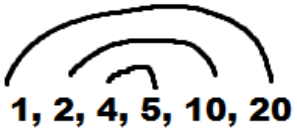
~~20 ÷ 3 = 6~~.667 (not a whole number)

20 ÷ 4 = 5

The factors must be listed from least to greatest:

1 , 2 , 4 , 5 , 10 , 20

You can double check your work by making a rainbow:



Fractions

Greatest Common Factors

Finding the Greatest Common Factor (GCF)

When you have found the factors of two numbers, you can then find the GCF of those two numbers.

Example:

Find the GCF for 8 and 20:
List all of the factors for each number

8: 1, 2, **4**, 8

20: 1, 2, **4**, 5, 10, 20

4 is the largest number that appears in both lists so it is the GCF

GCF= 4

Fractions

Reducing a Fraction

When you have a fraction, you can use the GCF of the numerator and denominator to reduce the fraction.

Ex:

$\frac{12}{15}$

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

15: 1, **3,** 5

GCF: 3 =

12 ÷ **3**= 4
15 ÷ **3**= 5