# Finding the GCF and LCM

Greatest Common Factor

Least Common Multiple

# Finding the GCF

Greatest Common Factor

# Steps to finding the GCF

- First, put all numbers in the group into their prime numbers.
- Second, write down the numbers that are common to all the numbers in the group.
- Multiply the common prime factors together.
- You have found the GCF.
- Example: Find the GCF of 20 and 30

$20 = 2 \times 2 \times 5$

$30 = 2 \times 3 \times 5$

$2 \times 5 = 10$

I lined the numbers up under each other to make it easy to see the common factors.

- What you have found is the largest number that both 20 and 30 have in common.
- If you find that there are no numbers in common, then the GCF is equal to 1.

# Finding the LCM

Least Common Multiple

# Steps to finding the LCM

- Just as you did in finding the GCF, put the numbers into their prime numbers.
- List the prime factors, lining up the same factors under each other.
- Bring down all of the factors. If the same factor appears in both numbers, only bring it down one time.
- Multiply the factors together to find the LCM.
- Example: Find the LCM of 10 and 18.

  $10 = 2 \times 5$

  $18 = 2 \times 3 \times 3$

  $2 \times 3 \times 3 \times 5 = 90$

I lined the numbers up under each other to make it easy to see the factors.

- What you have found is the smallest ("least") number that both 10 and 18 will divide into evenly.
- If you are given three numbers to find the LCM, you follow the same procedures above.