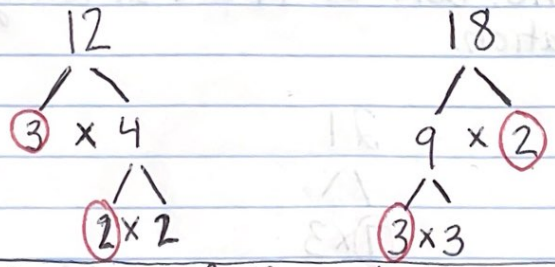
Factors and Multiples

Objective: To find the GCF and Lcm

Fill in the charts below.

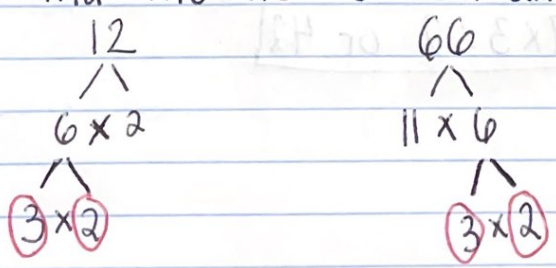
GCF	LCM
• stands for: Greatest Common factor	• stands for: Least common Multiple
Define:	Define:
• Greatest The largest of a set of values.	• Least The smallest of a set of values.
• Common The same feature among several numbers.	• Common The same feature among several numbers.
• Factor A number that is multiplied by another number.	• Multiple The product of a number and any whole number.

Ex. 1 Find the GCF of 12 and 18.



So, the GCF of 12 and 18 is 2x3, or 6.

Ex. 2 Find the GCF of 12 and 66.

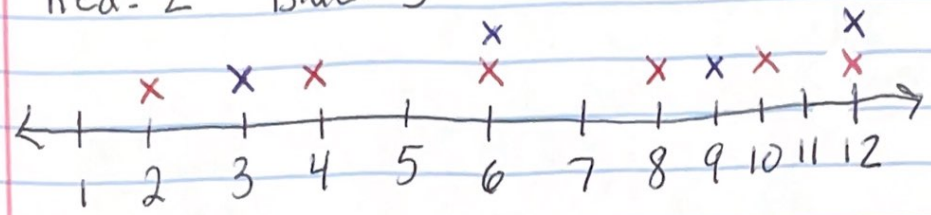


So, the GCF of 12 and 66 is 3x2 or 6.

Ex. 3 Find the LCM of 2 and 3.

Method 1: Use a number line.

Red: 2 Blue: 3



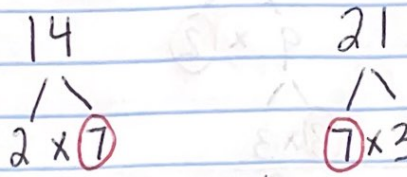
SO, 6 is the least common multiple of 2 and 3.

Method 2: Use an organize list.

Multiples of 2: 2, 4, (6) 8, 10, 12, 14, ...
Multiples of 3: 3, (6) 9, 12, 15, 18, ...

So, the LCM of 2 and 3 is 6.

Ex. 4. Find the LCM of 14 and 21 using prime factorization.



Multiply using each common prime factor only once.

SO, LCM is 7x3x2 or 42