

Name _____

Mrs. Doolan /Math6

5-3 Least Common Multiples

Objective: You've learned about divisibility and about the numbers that divide a given number. Now's let's learn to find the least common multiple of two numbers.

◆ **Multiple:** the product of two whole numbers.

Example:

Multiples of 6:	6	12	18	<u>24</u>	30	36	42	48
Multiples of 8:	8	16	<u>24</u>		32	40	48	

****Numbers which appear in both lists are common multiples.****

◆ **Least Common Multiple:** the *smallest* common multiple of the numbers.



****To find LCMs, make either a vertical or horizontal list and line up multiples in order. The Least Common Multiple is the smallest number that appears on both (or all three) lists.****

Vertical Method:

Find the LCM of 3 and 11:

<u>3</u>	<u>11</u>
3	
6	
9	
	11
12	
15	
18	
21	
	22
24	
27	
30	
<u>33</u>	<u>33</u>

Horizontal Method:

Find the LCM of 5 and 7

5:	5	10	15	20	25	30	<u>35</u>	40
7:	7	14		21	28		<u>35</u>	42



YOU TRY: Find the LCM of:

1. 12, 15

2. 16, 6

3. 5, 7, 10

EXTENSION: For any pair of numbers, is the least common multiple always greater than both of the numbers? Explain.