Least Common Multiples

We can use a spreadsheet to calculate the multiples of a number. After we set up the spreadsheet, you can input numbers and determine their least common multiple.

Use column A to enter the numbers for which you want to find the least common multiple.

Set the formulas for columns B through L as $(A1\times 2, A1\times 3, A1\times 4)$, and so on. (The formula for column B is =A1*2) Set the formula in B1 and then copy and paste the formula in B2, B3, B4, and B5. Repeat the process for columns C through L.

After you have created the spreadsheet to calculate the values, look for numbers in common in each row. You can change the numbers in column A and it will recalculate the multiples.

Here is an example of the spreadsheet.

	A	B	C	D	E	F	G	H	I	J	K	L
1	3	6	9	12	15	18	21	24	27	30	33	36
2	4	8	12	16	20	24	28	32	36	40	44	48
3	6	12	18	24	30	36	42	48	54	60	66	72
4		0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0

The least common multiple of 3, 4, and 6 is 12.

Use the spreadsheet to find the least common multiple of each set of numbers.

1. 10 and 8
2. 6 and 27
3. 8 and 14

4. 12 and 14
5. 8, 12, and 16
6. 4, 9, and 12

7. Is 50 a common multiple of 5, 10, and 6? Explain_____

_____

_____

_____

8. How many columns would you need in a spreadsheet to show the least common multiple of 16 and 17? Explain._____

_____

_____

_____

9. In Julie's neighborhood an ice cream truck comes every 3 days and a snow cone truck comes every 4 days. Today both trucks were in the neighborhood, how many days will it be until the ice cream truck and the snow cone truck are in the neighborhood again?_____

_____

_____

10. Write a question of your own that uses the lcm to determine the answer.

_____

_____

_____

_____

_____