

Least Common Multiple

The smallest number/value which can be multiplied from a set of numbers/values.

Method 1: "Old School"

List multiples of each number in question until a match is found.

Egg samples:

LCM of 12 & 7

12: 12, 24, 36, 48, 60, 72, **84**

7: 7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, **84**

LCM of 4 & 3

4: 4, 8, **12**

3: 3, 6, 9, **12**

Method 2: "Tic-Tac-Toe"

① Place originals in top middle & top right.

② Place any common factor on far left

③ Place the originals divided by the factor, under the old originals.

④ Repeat until finished. Multiply all values inside the "L"

Egg Sample:

	2	8	12
1	12	7	
	2	4	6
	1	2	3

$$2 \cdot 2 \cdot 1 \cdot 2 \cdot 3 = 24$$

$$1 \cdot 12 \cdot 7 = 84$$

Greatest Common Factor

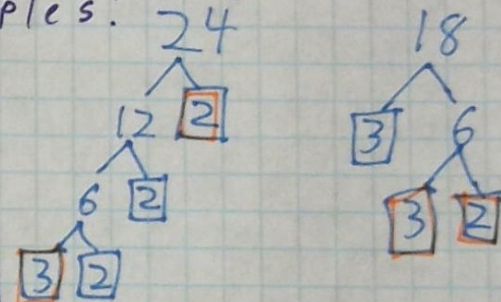
The largest number/value which can be multiplied from a set of numbers/values.

Method 1: Prime Factors.

Use Prime Factorization. Multiply common factors together. Egg samples:

Common: 2 · 3

GCF = 6



Method 2: Old School

List factors. Choose Largest common factor.

Egg samples: 24: 1, 2, 3, 4, **6**, 8, 12, 24

18: 1, 2, 3, **6**, 9, 18

- Same directions as on LCM side, but only multiply the far left side.

Egg Samples:

2	24	18
3	12	9
1	4	3

$$2 \cdot 3 \cdot 1 = 6$$

2	36	48
3	18	24
2	6	8
1	3	4

$$2 \cdot 3 \cdot 2 \cdot 1 = 12$$