

Least Common Multiple (LCM)

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Smallest Share multiplication

Multiple - a number that is a product of another number

TWO METHODS

① List Method

STEPS

- Make a multiplication table for each number
- Look for the smallest number that they both have

example LCM of 4 and 5 is 20.

	1	2	3	4	5	6
4	4	8	12	16	20	24
5	5	10	15	20	25	30

example LCM of 3, 4 and 6 is 12

	1	2	3	4	5	6	7	8	9	10	11	12
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
6	6	12	18	24	30	36	42	48	54	60	66	72

② Cake Method

STEPS

- Identify divisors until you get to 1 (just like GCF)
- Multiply BOTH factors and bottom row (L)

LCM of 16 and 64 is 64.

2	16	64
2	8	32
2	4	16
2	2	8
1	1	4

$$2 \times 2 \times 2 \times 2 \times 1 \times 1 \times 4$$

16×4
64

example LCM of 48 and 36 is 144.

2	48	36
2	24	18
3	12	9
1	4	3

$$2 \times 2 \times 3 \times 1 \times 4 \times 3$$

$4 \times 3 \times 1 \times 4 \times 3$
 $12 \times 1 \times 4 \times 3$
 $12 \times 4 \times 3$
 48×3
144

example LCM of 3 and 7 is 21

1	3	7
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$$1 \times 3 \times 7$$

21