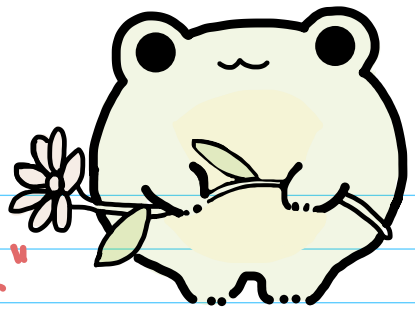
4.7 LCM



Multiples - "counting by a number"

multiples of three: 3, 6, 9, 12, (15), 18, 21, 24 ...

Multiples of 5: 5, 10, (15) 20, 25, 30, 35 ...

LCM

"Smallest multiples they have in common"

LCM of 3, 5 = 15

LCM of 10 & 15 = 30

10: 10, 20, (30) 40, 50, 60

15: 15, (30) 45, 60

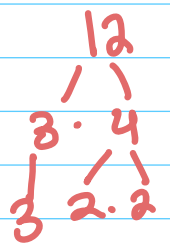
LCM = 30

3: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, (36) ....

4: 4, 8, 12, 16, 20, 24, 28, (30), (36)

9: 9, 18, 27, (36) 45, 54

LCM = 36

Multiples of 12	Factors of 12	Prime factorization of 12
12, 24, 36, 48, 60, ...	1, 2, 3, 4, 6, 12	 $2^2 \cdot 3$

Factors of 20	Prime factorization of 20	Multiples of 20
1, 2, 4, 5, 10, 20	$20 = 4 \cdot 5 = 2 \cdot 2 \cdot 5$ $2^2 \cdot 5$	20, 40, 60, 80, 100, 120...