

Notes on Finding

Least Common Multiple

Multiples: a number multiplied by 1, 2, 3, 4, ... to find another number. For example, the multiples of 4 are 4, 8, 12, 16, 20, 24, . . . Multiples are a never ending list of numbers.

Least Common Multiple (LCM for short): The smallest common multiple for a set of numbers.

For example, let's find the LCM for 6 and 8. The first 12 multiples of 6 are 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, and 72. The first 12 multiples of 8 are 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, and 96. The common multiples that appear SO FAR are 24, 48, and 72, but this is by no means all of the common multiples. (It is IMPOSSIBLE to find all of the common multiples.) As one can see, 24 is the smallest number that appears in both lists of multiples. So, the LCM of 6 and 8 is 24.