LEAST COMMON MULTIPLE

The least common multiple is the smallest value divisible by two or more numbers. There are two common strategies for finding the LCM.

Strategy #1

List the multiples of two numbers until you see a multiple appear in both lists. This shared multiple will be your LCM.

EXAMPLE 1: Find the LCM of 18 and 30.

18: 18, 36, 54, 72, 90, 108, 126...

30: 30, 60, 90, 120, 150...

The lowest multiple they have in common is 90, so the LCM = 90.

EXAMPLE 2: Find the LCM of 32 and 40.

32: 32, 64, 128, 160, 192, 224...

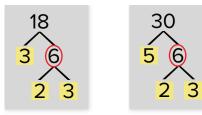**40:** 40, 80, 120, 160, 200, 240...

The lowest multiple they have in common is 160, so the LCM = 160.

Strategy #2

Use the GCF to find your LCM. First, factor both numbers. Then, find the product of the GCF and the remaining factors.

EXAMPLE: Find the LCM of 18 and 30.

18: Prime factorization = 2·3·3
30: Prime factorization = 2·3·5
Greatest Common Factor (GCF) = 6

$6 \cdot 3 \cdot 5 = 90$, which means the LCM of 18 and 30 is 90.