

Objective 4

Find the Least Common Multiple of Two Whole Numbers

Vocab:

Least Common Multiple (LCM): a number that is the *smallest* multiple of two or more numbers

Example 1: What is the least common multiple of 8 and 10?

Step 1: List the multiples of both numbers

Number	Multiples
8	8,16,24,32,40,48,56,64,72,80
10	10,20,30,40,50,60,70,80,90

Step 2: Identify the common multiples of 8 and 10. List the numbers from the table that are **common** to both 8 and 10

Common multiples: 40, 80

Step 3: Identify the least common multiple (the smallest number) the two numbers have in common.

The least common multiple is 40. ← Answer is 40

Example 2: What is the LCM of 4 and 5?

Step 1:

Number	Multiples
4	4,8,12,16,20,24,28,32,36,40
5	5,10,15,20,25,30,35,40,45

Step 2: Common Multiples: 20, 40

Step 3: The LCM of 4 and 5 is 20 ← Answer is 20

Practice: Find the LCM of the following pairs of numbers. List all the common multiples next to each pair. *Show your work!*

1. 2 and 3? _____
2. 11 and 8? _____
3. 8 and 5? _____
4. 7 and 8? _____
5. 3 and 8? _____
6. 6 and 8? _____
7. 9 and 12? _____
8. 11 and 7? _____

Additional Help:

<https://www.mathsisfun.com/least-common-multiple.html>

<https://www.khanacademy.org/math/pre-algebra/factors-multiples/least-common-multiple/v/least-common-multiple-exercise>

Guided Practice

LCM of 7 and 3

LCM of 4 and 12