How do we Find the HCF and LCM of 2 numbers? Part 1

Video URL:

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In the previous segment, we saw the **Factor Tree Approach**. In this segment, let us see how to find the HCF and LCM of 2 numbers.

How to Find the HCF and LCM of two numbers?

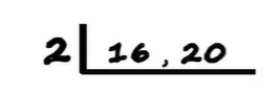
Q. Find the HCF and LCM of 16 and 20.

Solution:

Use the Common Division Method for finding the HCF and LCM of 16 and 20.

Step 1: Write numbers and their common factor to the left of these numbers.

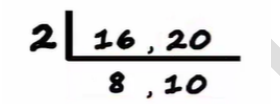
Write the numbers separated by a comma. The common factor of 16 and 20 is 2.



Step 1

Step 2: Write the quotients underneath.

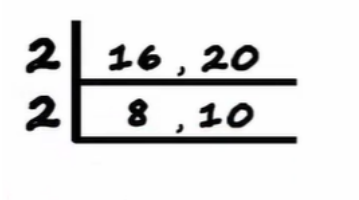
The quotient here is 8 and 10 for 16 and 20 respectively.



Step 2

Step 3: Write their common factors to the left of these numbers.

As 8 and 10 are not coprime numbers, find their common factor which is 2.

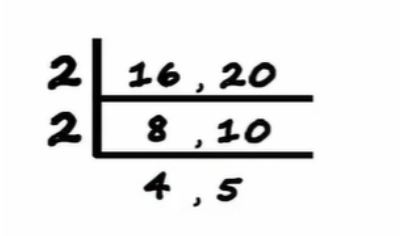


Step 3

Step 4: Write the quotients underneath.

The quotient here is 4 and 5 for 8 and 10 respectively.

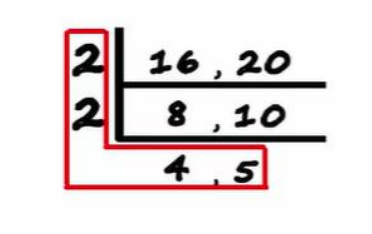
Stop here since **4 and 5** are co-prime numbers.



Step 4

Step 5: Find the LCM.

The product of the numbers in this L shape gives the LCM of the two numbers.

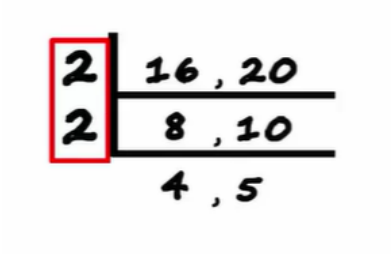


Step 5

LCM = 2 x 2 x 4 x 5 = 80

Step 6: Find the HCF.

The product of the factors on the left gives us the HCF



HCF = 2 x 2 = 4.

Summary

HCF and LCM of 2 numbers using Common Division	• Write numbers • Write common factors on left • Write quotient and undivided numbers underneath • Continue the process till co-prime numbers are obtained • Find LCM and HCF

What's next?

In our next segment of Class 10 Maths, we will find the **HCF and LCM of 2 numbers.**