Relationship between the HCF and LCM

For two given natural numbers, (One number) × (Other number) = (Their HCF) × (Their LCM)

Thus, HCF = $(One number) \times (Other number)$ (Their LCM) Also, LCM = $(One number) \times (Other number)$ (Their HCF)

Let us understand with some examples: Example 1: If the LCM of 77 and 99 is 693, then find HCF.

Solution: LCM × HCF = One number × Other number

Or $693 \times HCF = 77 \times 99$ or $HCF = 77 \times 99 = 11$ 693

Hence, the required HCF is 11.

Example 2: The product of two numbers is 2160 and their HCF is 12. Find their LCM.

Solution: LCM × HCF = One number × Other number

Or LCM × 12 = 2160 or LCM = $\frac{2160}{12}$ = 180

Hence, the required LCM is 180.