

MONTH : AUGUST

SESSION : 1

CLASS : V

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 8

CHAPTER NAME : FACTORS AND MULTIPLES

SUB-TOPIC : GCF OR HCF: LISTING METHOD

EXERCISE : 8 B Q.NO. 1,2,3

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE :

Enable the students

- **To Understand the concept of factors.**
- **To understand to find out common factors and highest common factor.**

HIGHEST COMMON FACTOR

The **GCF** or **HCF** is the greatest whole number that is the **common factor** of given numbers.

Example : Find the H.C.F of 18 and 24

Method 1: Listing Method

Factors of 18 = 1 , 2 , 3 , 6 , 9 , 18

Factors of 24 = 1 , 2 , 3 , 4 , 6 , 8 , 12 , 24

The common factors are: **1,2,3** and **6**

▪ ▪ The H.C.F is **6**



LISTING METHOD



Example 2 : Find the H.C.F of 8, 12 and 30

Solution:

- ❖ **Factors of 8 = 1, 2, 4, 8**
 - ❖ **Factors of 12 = 1, 2, 3, 4, 6, 12**
 - ❖ **Factors of 30 = 1, 2, 3, 5, 6, 10, 15, 30**
- **The common factors are: 1, 2**
- **The H.C.F = 2**



EXERCISE : 8 [B]



1. Find the H.C.F of 27 and 36

Solution:

Factors of 27 = 1, 3, 9, 27

Factors of 36 = 1, 2, 3, 4, 6, 9, 12, 18, 36

Common factors of 27 and 36 are: 1, 3 and 9

∴ The H.C.F is 9



EXERCISE : 8 [B]



2. Find the H.C.F of 82 and 104

➤ **Solution:**

Factors of 82 : 1 , 2 , 41 , 82

Factors of 104: 1 , 2 , 4 , 8 , 13 , 26 , 52 , 104

Common factor of 84 and 104 are: 1 , 2

∴ The H.C.F is 2



EXERCISE : 8 [B]



3. Find the common factors and H.C.F of 20, 35 and 40

Solution:

Factors of 20: 1, 2, 4, 5, 10, 20

Factors of 35: 1, 5, 7, 35

Factors of 40: 1, 2, 4, 5, 8, 10, 20, 40

The common factors of 20, 35 and 40 are **1 and 5**

- The H.C.F is **5**





➤ Home assignment: Complete Ex.8 [B] Q.No.4 and 5 in the notebook.



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Students are able

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