

MONTH : AUGUST

SESSION : 9

CLASS : V

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 8

CHAPTER NAME : FACTORS AND MULTIPLES

SUB-TOPIC : RELATION BETWEEN H.C.F. , L.C.M. AND

NUMBERS, EXERCISE 8 D Q.NO. 5 TO 8

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE :

Enable the students

- **To Understand the concept of H.C.F. and L.C.M.**
- **To understand the relation between H.C.F. and L.C.M.**

EXERCISE 8 [D]



5. The greatest number which divides 1155 and 3080 exactly is 385.
find the least number which is divisible by 1155 and 3080

Solution:

The greatest number that divides 1155 and 3080 is **385**.

Which means **H.C.F.** of 1155 and 3080 = **385**

The least number which is divisible by 1155 and 3080 is **L.C.M.**
of **1155 and 3080**



EXERCISE 8 [D]



1155 and 3080

5	1155 , 3080
3	231 , 616
7	77 , 616
11	11 , 88
2	1 , 8
2	1 , 4
2	1 , 2
	1 , 1

$$\text{L.C.M.} = 5 \times 3 \times 7 \times 11 \times 2 \times 2 \times 2 = 9240$$

- The least number divisible by 1155 and 3080 is 9240



EXERCISE 8 [D]



6. Find the greatest number that can divide 663 and 975 exactly.

The H.C.F. of 663 and 975 = **39**

$$\begin{array}{r} 1 \\ 663 \overline{) 975} \\ \underline{663} \\ 312 \\ 312 \\ \underline{0} \\ 2 \\ 312 \overline{) 663} \\ \underline{624} \\ 39 \\ 39 \overline{) 312} \\ \underline{312} \\ 0 \end{array}$$

- The greatest number which can divide 663 and 975 exactly is **39**



EXERCISE 8 [D]



7. Which is the greatest 3-digit number which is exactly divisible by 9 and 21.

The L.C.M. of 9 and 21 = $3 \times 3 \times 7 = 63$

3	9, 21
3	3, 7
7	1, 7
	1, 1

The greatest 3-digit number = **999**

Let's find if 63 can divide 999 exactly



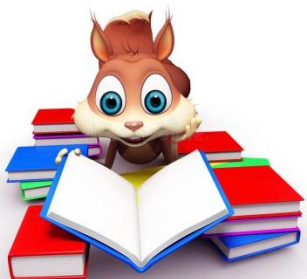
EXERCISE 8 [D]



$$\begin{array}{r} 15 \\ 63 \overline{) 999} \\ \underline{63} \\ 369 \\ \underline{315} \\ 54 \end{array}$$

54 = remainder

- The greatest 3-digit number which is exactly divisible by 63 = $999 - 54 = 945$
- ■ The greatest 3-digit number which is exactly divisible by 9 and 21 is **945**



EXERCISE 8 [D]



8. Find the greatest 4-digit number which is exactly divisible by 12, 32 and 48

The L.C.M. of 12, 32 and 48 = $2 \times 2 \times 2 \times 3 \times 2 \times 2 = 96$

2	12, 32, 48
2	6, 16, 24
2	3, 8, 12
3	3, 4, 6
2	1, 4, 2
2	1, 2, 1
	1, 1, 1

The greatest 4-digit number = **9999**

Let's find if 96 can divide 9999 exactly



EXERCISE 8 [D]



$$\begin{array}{r} 104 \\ 96 \overline{) 9999} \\ \underline{96} \\ 39 \\ \underline{36} \\ 390 \\ \underline{399} \\ 384 \end{array}$$

15 = remainder

- The greatest 4-digit number which is exactly divisible by 96 = $9999 - 15 = 9984$
 - The greatest 4-digit number which is exactly divisible by 12, 32 and 48 is **9984**



EXERCISE 8 [D]



- **Home Assignment – Complete Exercise 8 D
Q.No. 4,9 and 10 in your notebook.**



THANKING YOU
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