Chapter- 8

Factors and multiples

WORKSHEET

A. Fill in the blanks :

a) 1, 3, 5 and 15 are called factors of 15.

b) All even numbers are divisible by 2.

c) 1 is a number which is neither prime nor composite.

d) 18 is a multiples of 3 and 6.

e) Numbers that have only two factors, 1 and the number itself, are called prime numbers.

B. Match the following :

Column – A	**Column – B**
1. Factor of 35	iii) 50
2. Multiple of 5	ii) infinite
3. Factor of every number	i) 1
4. Smallest prime number	iv) 7
5. Factors of a number	v) 2

C. Do as directed:

a) Find the H.C.F. of 16, 24 and 85.

Solution:

HCF = 1

b) Find the L.C.M. of 16, 28 and 32

Solution:

LCM = 2X2X2X2X2X2X7X2 = 224

2 | 16, 28, 32
2 | 8, 14, 16
2 | 4, 7, 8
2 | 2, 7, 4
1, 7,

c) The H.C.F. of two numbers is 5 and L.C.M. is 60. If one of the numbers is 20, find the other number.

Solution:

other number = $\frac{LCM \times HCF}{one\ number} = \frac{5 \times 60}{20} = 15$

d) Find the greatest number which divides 90 and 405 without leaving a remainder.

Solution:

90 | 405 | 4
−360
45

90 | 90 | 2
−90
0

HCF = 45

So greatest number is 45

e) Three bells of a temple began ringing at 9 a.m. The first bell rings after every 30 minutes and the second one rings after every 45 minutes and the third one rings after every hour. At what time will they ring together again?

Solution:

LCM of 30, 45, 60

2 | 30, 45, 60
3 | 15, 45, 30
3 | 5, 15, 10
1, 3, 2

LCM = 2X5X3X3X2 = 180

180 minutes = 3 hours

at 12 o'clock all the bells ring together

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