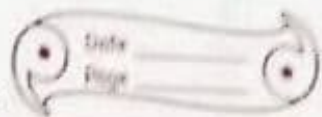


CHAPTER - 8

Factors and Multiples WORKSHEET



1. 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 Multiple of 3 and 6.

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

B.B. Match the following →

Column - A

Column - B

1. Factors of 35

(i) 1

2. Multiple of 5

(ii) Infinite

3. Factors of every number

(iii) 50

4. Smallest prime number

(iv) 7

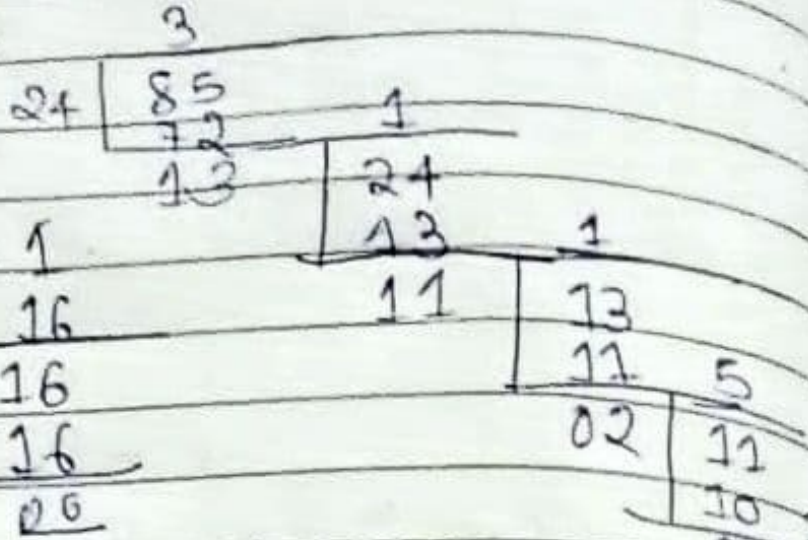
5. Factors of a number

(v) 2

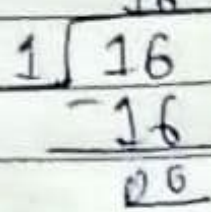
C. Do as directed:-

(a) Find the HCF of 16, 24 and 85.

Solution →



So, HCF = 1

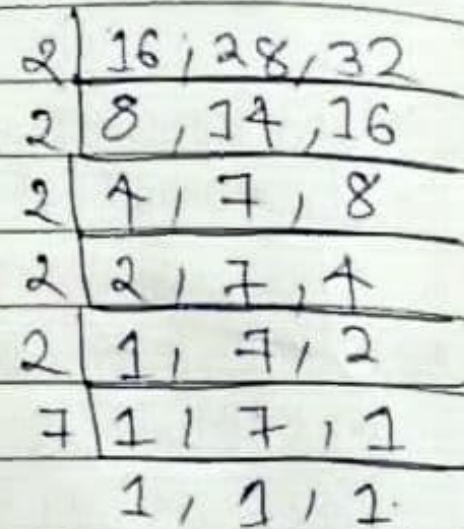


(b) Find the LCM of 16, 28 and 32.

Solution →

$$\text{LCM} = 2 \times 2 \times 2 \times 2 \times 2 \times 7 \times 2 = 224$$

So, LCM = 224



(c) The HCF of two numbers is 5 and L.C.M. is 60. If one of the numbers is 20, Find the other number.

Solution →

HCF of Two numbers = 5

LCM of Two numbers = 60

one of the numbers = 20

The other number = LCM \times HCF =

product of two numbers = 60×5

= 300 one no = 20

$$= \frac{300}{20} = 15$$

So, the other number is

15

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

Solution \Rightarrow ~~$90 \overline{) 405}$~~

$$\begin{array}{r} 4 \\ 90 \overline{) 405} \\ \underline{360} \\ 045 \\ \underline{045} \\ 0 \end{array}$$

$$\begin{array}{r} 4 \\ 90 \overline{) 405} \\ \underline{360} \\ 045 \\ \underline{045} \\ 0 \end{array}$$

So, HCF = 45

Q The 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 →

1st bell rings after = 30 minutes
 2nd bell rings after = 45 minutes
 3rd bell rings after = 1 hour = 60 minutes

They will ring together after LCM of 30, 45, 60 minutes.

2	30, 45, 60	LCM = $2 \times 2 \times 3 \times 3 \times 5$ = 180 minutes = 180 60 minutes = 3 hours
2	15, 45, 30	
3	15, 45, 15	
3	5, 15, 5	
5	5, 5, 5	
	1, 1, 1	

So, All Three bells will ring together after 3 hours.