

chapter - 8  
Worksheet  
Factors and multiples



~~Worksheet~~

A. 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 ~~composite~~ number.

B. 1. Factor of 35 - iv) 7

2. Multiple of 5 - iii) 50

3. Factors of every number - ii)

4. Smallest prime number - (i) 2

5. Factors of a number - ii) infinite

$$\begin{array}{r} 24 \quad 92 \\ \times 3 \quad \times 3 \\ \hline 72 \quad 96 \end{array}$$

$$\begin{array}{r} 20 \quad 60 \\ \times 3 \quad \times 3 \\ \hline 60 \quad 180 \end{array}$$

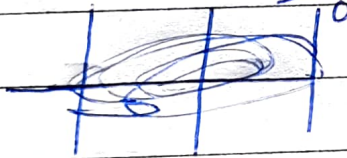
$$\begin{array}{r} 3 \\ 24 \overline{) 85} \\ \underline{-72} \quad 1 \\ 13 \overline{) 24} \\ \underline{-12} \quad 1 \\ 12 \overline{) 13} \\ \underline{-12} \quad 1 \end{array}$$

$$\begin{array}{r} 1 \\ 13 \overline{) 16} \\ \underline{-13} \quad 4 \\ 3 \overline{) 13} \\ \underline{-12} \quad 3 \\ 1 \overline{) 3} \\ \underline{-3} \quad 0 \end{array}$$

$$\begin{array}{r} 12 \\ 12 \overline{) 12} \\ \underline{-12} \quad 0 \end{array}$$

$$\begin{array}{r} 3 \\ 3 \overline{) 3} \\ \underline{-3} \quad 0 \end{array}$$

b)



$$\begin{array}{r} 2 \overline{) 16, 28, 32} \\ 2 \overline{) 8, 12, 16} \\ 2 \overline{) 4, 6, 8} \\ 2 \overline{) 2, 3, 4} \\ 2 \overline{) 1, 3, 2} \\ 3 \overline{) 1, 3, 1} \\ 1 \overline{) 1, 1, 1} \end{array}$$

$$L.C.M = 2 \times 2 \times 2 \times 2 \times 2 \times 3 = 96$$

c)  $L.C.M \times H.C.F =$  The other number  
 number  $\times$  number

$$\rightarrow \text{the other number} = \frac{60 \times 5}{20} = 15$$

$$\begin{array}{r} 4 \\ 45 \\ \times 9 \\ \hline 405 \end{array}$$

$$\begin{array}{r} 4 \\ 18 \\ \times 5 \\ \hline 90 \end{array}$$



d)  $\begin{array}{r} 90 \overline{) 405} \\ \underline{405} \\ 0 \end{array}$   
 H.C.F = 0

90 is the greatest number which leaves no remainder.

e)  $\begin{array}{l} 3 \overline{) 9, 30, 45} \\ 3 \overline{) 3, 10, 5} \\ 5 \overline{) 10, 5} \\ 5 \overline{) 5} \\ 1, 1, 1 \end{array}$

L.C.M =  $3 \times 3 \times 2 \times 5 = 90$

They will again ring together at 9 am.