

# WORKSHEET

## ch-8-Factors and multiples

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 ~~factor~~ multiple 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. Factors of 35                               | i) 1         |
| 2. Multiple of 5                               | ii) infinite |
| 3. Factor of every number                      | iii) 50      |
| 4. Smallest prime number                       | iv) 7        |
| 5. <del>Factors</del> of a number<br>multiples | v) 2         |

$$\begin{array}{r}
 b) \quad 2 \overline{) 16, 28, 32} \\
 \underline{2 \overline{) 8, 14, 16}} \\
 \quad 4 \overline{) 4, 7, 8} \\
 \quad \quad 7 \overline{) 1, 7, 2} \\
 \quad \quad \quad 2 \overline{) 1, 1, 2} \\
 \quad \quad \quad \quad 1, 1, 1
 \end{array}$$

L.C.M. =  $2 \times 2 \times 4 \times 7 \times 2 = 224$

c) H.C.F. of two numbers is 5.  
 L.C.M. = 60  
 one number = 20

$\frac{\text{L.C.M.} \times \text{H.C.F.}}{\text{one number}} = \text{the other number}$

The other number is  $= \frac{15 \times 1}{20 \times 1} = 15$

The other number is 15

d) ~~3/90~~ H.C.F. of 90 and 405

$3 \overline{) 90}$	$5 \overline{) 405}$
$3 \overline{) 30}$	$3 \overline{) 81}$
$2 \overline{) 10}$	$3 \overline{) 27}$
$5 \overline{) 5}$	$3 \overline{) 9}$
1	$3 \overline{) 3}$
	1

H.C.F. =  $3 \times 3 \times 2 \times 5$   
 $5 \times 3 \times 3 \times 3 \times 3$   
 $3 \times 3 \times 5 = 45$

Ans

C. Three bells of a temple began ringing 9 am  
The 1st bell rings after every 30 min.

The 2nd bell rings after every 45 min.

The 3rd bell rings after every 1 hr (60 min).

$$\text{L-CM} = 3 \mid 30, 45, 60$$

$$5 \mid 10, 15, 20$$

$$2 \mid 2, 3, 4$$

$$3 \mid 1, 3, 2$$

$$2 \mid 1, 1, 2$$

$$1, 1, 1$$

$$\text{L.C.M.} = 3 \times 5 \times 2 \times 3 \times 2 = 180 \text{ mins (3 hrs)}$$

(12 pm)

~~At~~ At 12 p.m they will ring together  
again.