

Factors and Multiples

A. Fill in the blanks

1. One is a factor of everyone

2. 2 is the first even prime number.

3. The smallest multiple of a number is the number itself

4. 0 is a multiple of every number.

5. Prime numbers are having Two numbers of factors.

B. ~~CHOOSE~~ CHOOSE The connect answer.

6. Every number is a multiple of 1.

- a) 0 b) 1 c) 33 d) None

7. Composite numbers are the numbers having more than two factors, i.e. other than 1 and the number itself.

- a) 0 b) 1 c) 33 d) None

8. Every composite number can ~~be~~ be expressed as a product of all its prime factors.

- a) Prime ~~b) Composite~~ c) HCF d) None

9. Composite numbers are having more than 2 factors.

- ~~a) 1~~ b) 1 c) 3 d) None

10. When a particular number is a multiple of 2 or more numbers, it is called a LCM.

- ~~a) LCM~~ b) HCF c) Common multiple d) None

C. Answer the following questions

11. Write the first five multiples of 18

Ans 18, 36, 54, 72, 90

12. Find the HCF of 40, 50, and 60 by Prime factorization method.

Ans

2 40	2 50	2 60	2 × 5 = 10
2 20	5 25	2 30	$(2 \times 2, 2, 5)$ $(2, 5, 5)$ $(2, 2, 3, 5)$
2 10	5 5	3 15	
5 5	1	5 5	
1		1	

13. Find the LCM of 36 and 52 by listing method.

Ans $36 = 36, 72, 108, 144, 180, 216$
 $252, 288, 324, 360, 396, 432, 468$
 $52 = 52, 104, 156, 208, 260, 312$
 $364, 416, 468$ LCM = 468

~~13. Find the LCM by common division method.~~

14. Find the LCM of 15, 90 by common division

Ans =

Ans

2	15, 90	
3	15, 45	LCM = $2 \times 3 \times 3 \times 5 = 90$
3	5, 15	
5	5, 5	
	1, 1	

15. Find the HCF of 144, 180 and 192 by common division method.

Ans

2	144, 180, 192
2	72, 90, 96
3	36, 45, 48
	12, 15, 16

HCF = $2 \times 2 \times 3 = 12$