CHAPTER-8

H.C.F AND L.C.M

WORKSHEET

1 Fill in the blanks.

i) A_____of a number is exactly divisible by the number.

ii) _____is a factor of every number.

iii) A number has_____number of multiples.

iv) A multiple of a number is either_____than or_____to the number.

v) All the multiples of 2 are called_____numbers.

vi) Is 16 a perfect number? (Yes/No) _____

vii) A number is a_____of each of its factors.

viii) 2 is only_____number which is even.

ix) An exact divisor of a number is called a_____of the number.

x) The number of factors of a prime number is_____.

2. Choose the correct answer.

i) Which is the smallest factor of 2314?

a) 2314 b) 1 c) 2 d) 1152

ii) Which is the smallest odd composite number?

a) 1 b) 3 c) 9 d) 15

iii) Which of the following is divisible by 2 but not by 4?

a) 102 b) 228 c) 340 d) 556

iv) HCF of the largest 4-digit number and the largest 5-digit number is

a) 999 b) 9999 c) 9 d) 99

v) A number is always divisible by 165 if the number is divisible by

a) 6, 9,13 b) 2, 4, 7 c) 3, 5, 11 d) 2, 7, 13

3. Write all the factors of:

(i) 15 (ii) 55
(iii) 48 (iv) 36 (v) 84

4. Write all prime numbers:

(i) less than 25

(ii) between 15 and 35

(iii) between 8 and 76

5. Write the prime numbers from:

(i) 5 to 45 (ii) 2 to 32

(iii) 8 to 48 (iv) 9 to 59

6. Write the prime factors of:

(i) 16 (ii) 27

(iii) 35 (iv) 49

7. If P_n means prime factors of n, find:

(i) P_6 (ii) P_{24}

(iii) P_{50} (iv) P_{42}

8. Using the common factor method, find the H.C.F. of:

(i) 16 and 35 (ii) 25 and 20

(iii) 27 and 75 (iv) 8, 12 and 18

10. Using the division method, find the H.C.F. of the following:

(i) 16 and 24 (ii) 18 and 30

(iii) 7, 14 and 24 (iv) 70, 80, 120 and 150

11. Use a method of your own choice to find the H.C.F. of:

(i) 45, 75 and 135 (ii) 48, 36 and 96

(iii) 66, 33 and 132 (iv) 24, 36, 60 and 132

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12. Find the greatest number that divides each of 180, 225 and 315 completely.

13. Show that 45 and 56 are co-prime numbers.

14. Out of 15, 16, 21 and 28, find out all the pairs of co-prime numbers.

15. Find the greatest number that will divide 93, 111 and 129, leaving remainder 3 in each case.

16. Using the common multiple method, find the L.C.M. of the following:

(i) 8, 12 and 24 (ii) 10, 15 and 20 (iii) 3, 6, 9 and 12

17. Find the L.C.M. of each of the following groups of numbers, using (i) the prime factor method and (ii) the common division method:

(i) 18, 24 and 96 (ii) 100, 150 and 200

(iii) 14, 21 and 98 (iv) 22, 121 and 33

18. The H.C.F. and the L.C.M. of two numbers are 50 and 300 respectively. If one of the numbers is 150, find the other one.

19. The product of two numbers is 432 and their L.C.M. is 72. Find their H.C.F.

20. The product of two numbers is 19,200 and their H.C.F. is 40. Find their L.C.M.

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