

EduSahara™ Learning Center Assignment**Grade : Class X, SSC****Chapter : Real Numbers****Name : Prime Factorization and L.C.M and H.C.F**

1. Find the prime factorization of 12

(i) $2^2 \times 3$ (ii) $2^2 \times 6$ (iii) $2^2 \times 3^2$

(iv) 2×3 (v) $2^2 \times 3^{-2}$

2. Find the prime factorization of 80

(i) $(-1)^4 \times 5$ (ii) $2^3 \times 5$ (iii) $2^4 \times 7$

(iv) $2^4 \times 5$ (v) $2^5 \times 5$

3. Find the prime factorization of 1050

(i) $2 \times 3^2 \times 5^2 \times 7$ (ii) $1 \times 3 \times 5^2 \times 7$ (iii) $2 \times 3 \times 3^2 \times 7$

(iv) $2 \times 3 \times 5^2 \times 7$ (v) $2 \times 3 \times 7^2 \times 7$

4. Find the prime factorization of 5625

(i) 3×5^4 (ii) $3^2 \times 7^4$ (iii) $3^2 \times 2^4$

(iv) $3^2 \times 5^4$ (v) $3^2 \times 5^5$

5. Find the number of prime factors of 8

(i) 2 (ii) 1 (iii) 3 (iv) (-2) (v) 0

6. Find the number of prime factors of 50

(i) (-1) (ii) 2 (iii) 4 (iv) 3 (v) 1

7. Find the number of prime factors of 156

(i) 2 (ii) 3 (iii) 4 (iv) 5 (v) 1

8. Find the number of prime factors of 2700

(i) 1 (ii) 3 (iii) 4 (iv) 2 (v) 5

9. Find the total number of factors of 45

(i) 6 (ii) 5 (iii) 8 (iv) 3 (v) 7

10. Find the total number of factors of 68

(i) 5 (ii) 4 (iii) 6 (iv) 7 (v) 8

11. Find the total number of factors of 1029

(i) 11 (ii) 7 (iii) 8 (iv) 5 (v) 9

12. Find the total number of factors of 5600

(i) 38 (ii) 33 (iii) 37 (iv) 36 (v) 35

13. Find the HCF of {14,12}

(i) 1 (ii) (-1) (iii) 3 (iv) 2 (v) 4

14. Find the HCF of {18,22}

(i) 1 (ii) 0 (iii) 3 (iv) 2 (v) 4

15. Find the HCF of {22,14,16}

(i) 4 (ii) 1 (iii) 2 (iv) 3 (v) (-1)

16. Find the HCF of {15,49,35,40}

(i) 1 (ii) (-1) (iii) 0 (iv) 4 (v) 2

17. Find the HCF of {270,165}

(i) 14 (ii) 15 (iii) 18 (iv) 16 (v) 12

18. Find the HCF of {234,288}

(i) 18 (ii) 20 (iii) 19 (iv) 17 (v) 16

19. Find the HCF of {312,408,144}

(i) 25 (ii) 27 (iii) 23 (iv) 21 (v) 24

20. Find the HCF of {1110,450,600,1020}

(i) 29 (ii) 27 (iii) 31 (iv) 33 (v) 30

21. Find the LCM of {8,9}

(i) 74 (ii) 70 (iii) 71 (iv) 72 (v) 73

22. Find the LCM of {18,10}

(i) 90 (ii) 87 (iii) 93 (iv) 91 (v) 89

23. Find the LCM of {10,18,6}

(i) 91 (ii) 87 (iii) 93 (iv) 90 (v) 89

24. Find the LCM of {4,18,9,15}

(i) 178 (ii) 181 (iii) 180 (iv) 182 (v) 179

25. Find the LCM of {90,135}

(i) 271 (ii) 269 (iii) 272 (iv) 268 (v) 270

26. Find the LCM of {96,36}

(i) 290 (ii) 287 (iii) 285 (iv) 289 (v) 288

27. Find the LCM of {40,130,180}

(i) 4680 (ii) 4683 (iii) 4681 (iv) 4679 (v) 4677

28. Find the LCM of {72,16,32,64}

(i) 579 (ii) 575 (iii) 573 (iv) 576 (v) 577

29. Find the product of LCM and HCF of {4,6}

(i) 21 (ii) 23 (iii) 24 (iv) 25 (v) 27

30. Find the product of LCM and HCF of {14,25}

(i) 350 (ii) 347 (iii) 351 (iv) 353 (v) 349

31. Find the product of LCM and HCF of {14,12,21}

(i) 87 (ii) 83 (iii) 81 (iv) 84 (v) 85

32. Find the product of LCM and HCF of {16,9,8,27}

(i) 435 (ii) 431 (iii) 433 (iv) 429 (v) 432

Assignment Key

- 1) (i)
- 2) (iv)
- 3) (iv)
- 4) (iv)
- 5) (ii)
- 6) (ii)
- 7) (ii)
- 8) (ii)
- 9) (i)
- 10) (iii)
- 11) (iii)
- 12) (iv)
- 13) (iv)
- 14) (iv)
- 15) (iii)
- 16) (i)
- 17) (ii)
- 18) (i)
- 19) (v)
- 20) (v)
- 21) (iv)
- 22) (i)
- 23) (iv)
- 24) (iii)
- 25) (v)
- 26) (v)
- 27) (i)
- 28) (iv)
- 29) (iii)
- 30) (i)
- 31) (iv)
- 32) (v)