EduSahara™ Assignment

Name : Prime Factorization

Chapter : Playing with Numbers

Grade : CBSE Grade VI

1. Find the prime factorization of 15

   (i) 3×4 (ii) 6×5 (iii) 3×3 (iv) 3×5 (v) $3^2 \times 5$

2. Find the prime factorization of 88

   (i) $4^3 \times 11$ (ii) $2^3 \times 8$ (iii) $2^2 \times 11$ (iv) $2^3 \times 11$ (v) $2^3 \times 11^2$

3. Find the prime factorization of 108

   (i) $2^2 \times 3^2$ (ii) $2^2 \times 3^3$ (iii) $2^3 \times 3^3$ (iv) $(-1)^2 \times 3^3$ (v) $5^2 \times 3^3$

4. Find the prime factorization of 5616

   (i) $2^4 \times 3^2 \times 13$ (ii) $2^4 \times 3^3 \times 13^2$ (iii) $2^4 \times 3^3 \times 13$ (iv) $2^4 \times 3^3 \times 15$ (v) $2^4 \times 1 \times 13$

5. Find the number of prime factors of 26

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

6. Find the number of prime factors of 52

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

7. Find the number of prime factors of 324

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

8. Find the number of prime factors of 5184

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

9. Find the total number of factors of 49

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

10. Find the total number of factors of 57

    (i) 4 (ii) 3 (iii) 5 (iv) 6 (v) 1

11. Find the total number of factors of 726

    (i) 11 (ii) 9 (iii) 14 (iv) 13 (v) 12

12. Find the total number of factors of 3960

    (i) 47 (ii) 46 (iii) 51 (iv) 49 (v) 48

13. Find the prime factorization of 32

    (i) 2^5 (ii) 2^4 (iii) 2^6 (iv) $(-1)^5$ (v) 4^5

14. Find the prime factorization of 54

(i) 2×3^2 (ii) 2×0 (iii) $2^2 \times 3^3$ (iv) 2×6^3 (v) 2×3^3

15. Find the prime factorization of 320

(i) $2^6 \times 2$ (ii) $2^6 \times 7$ (iii) $2^6 \times 5$ (iv) $2^5 \times 5$ (v) $2^7 \times 5$

16. Find the prime factorization of 3780

(i) $2^2 \times 6^3 \times 5 \times 7$ (ii) $2^2 \times 3^3 \times 4 \times 7$ (iii) $2^2 \times 3^3 \times 5 \times 7^2$ (iv) $2^2 \times 3 \times 5 \times 7$ (v) $2^2 \times 3^3 \times 5 \times 7$

17. Find the number of prime factors of 20

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

18. Find the number of prime factors of 78

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

19. Find the number of prime factors of 640

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

20. Find the number of prime factors of 5760

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

21. Find the total number of factors of 40

(i) 7 (ii) 10 (iii) 9 (iv) 5 (v) 8

22. Find the total number of factors of 66

(i) 9 (ii) 7 (iii) 8 (iv) 6 (v) 11

23. Find the total number of factors of 504

(i) 26 (ii) 24 (iii) 23 (iv) 22 (v) 25

24. Find the total number of factors of 10935

(i) 15 (ii) 16 (iii) 17 (iv) 13 (v) 19

Assignment Key

1) (iv)	2) (iv)	3) (ii)	4) (iii)	5) (v)	6) (iii)
7) (v)	8) (i)	9) (iv)	10) (i)	11) (v)	12) (v)
13) (i)	14) (v)	15) (iii)	16) (v)	17) (iii)	18) (v)
19) (iii)	20) (iv)	21) (v)	22) (iii)	23) (ii)	24) (ii)