

EduSahara™ Learning Center Assignment**Grade : Class VI, ICSE****Chapter : Factors and Multiples****Name : Prime Factorization****Licensed To : Teachers and Students for non-commercial use**

1. Find the prime factorization of 46

(i) $2^2 \times 23$ (ii) 2×25 (iii) 2×21

(iv) 2×23 (v) 2×22

2. Find the prime factorization of 96

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

(iv) $2^5 \times 6$ (v) $2^5 \times 2$

3. Find the prime factorization of 528

(i) $2^4 \times 3 \times 11$ (ii) $2^4 \times 6 \times 11$ (iii) $2^4 \times 3^2 \times 11$

(iv) $2^4 \times 1 \times 11$ (v) $2^3 \times 3 \times 11$

4. Find the prime factorization of 3744

(i) $2^5 \times 1 \times 13$ (ii) $2^5 \times 3^2 \times 13^2$ (iii) $5^5 \times 3^2 \times 13$

(iv) $2^4 \times 3^2 \times 13$ (v) $2^5 \times 3^2 \times 13$

5. Find the number of prime factors of 48

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

6. Find the number of prime factors of 51

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

7. Find the number of prime factors of 756

(i) 1 (ii) 4 (iii) 2 (iv) 6 (v) 3

8. Find the number of prime factors of 1296

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

9. Find the total number of factors of 21

(i) 3 (ii) 5 (iii) 4 (iv) 2 (v) 6

10. Find the total number of factors of 74

(i) 4 (ii) 3 (iii) 2 (iv) 5 (v) 6

11. Find the total number of factors of 672

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

12. Find the total number of factors of 6240

(i) 50 (ii) 47 (iii) 45 (iv) 49 (v) 48

Assignment Key

- 1) (iv)
- 2) (i)
- 3) (i)
- 4) (v)
- 5) (v)
- 6) (v)
- 7) (v)
- 8) (iii)
- 9) (iii)
- 10) (i)
- 11) (iv)
- 12) (v)