

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

1. Find the prime factorization of 8

(i) 2^2 (ii) $(-1)^3$ (iii) 4^3

(iv) 2^4 (v) 2^3

2. Find the prime factorization of 75

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

(iv) 3×7^2 (v) 2×5^2

3. Find the prime factorization of 2352

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

(iv) $2 \times 3 \times 7^2$ (v) $2^4 \times 3 \times 7^2$

4. Find the prime factorization of 5250

(i) $2 \times 3 \times 5^3 \times 7$ (ii) $2 \times 3 \times 5^3 \times 10$ (iii) $1 \times 3 \times 5^3 \times 7$

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

5. Find the number of prime factors of 38

(i) 2 (ii) 0 (iii) 5 (iv) 3 (v) 1

6. Find the number of prime factors of 74

(i) 0 (ii) 2 (iii) 3 (iv) 1 (v) 5

7. Find the number of prime factors of 270

(i) 6 (ii) 3 (iii) 2 (iv) 4 (v) 0

8. Find the number of prime factors of 1920

(i) 3 (ii) 0 (iii) 2 (iv) 6 (v) 4

9. Find the total number of factors of 36

(i) 8 (ii) 7 (iii) 10 (iv) 9 (v) 11

10. Find the total number of factors of 77

(i) 5 (ii) 2 (iii) 7 (iv) 3 (v) 4

11. Find the total number of factors of 468

(i) 16 (ii) 18 (iii) 17 (iv) 19 (v) 21

12. Find the total number of factors of 14784

(i) 55 (ii) 56 (iii) 59 (iv) 53 (v) 57

Assignment Key

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