



1. Find the prime factorization of 240

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

2. Find the prime factorization of 8100

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

3. Find the prime factorization of 540

- (i) $2 \times 3^3 \times 5$ (ii) $2^2 \times 3^3 \times 8$ (iii) $2^2 \times 3^4 \times 5$ (iv) $2^2 \times 3^3 \times 5$ (v) $2^2 \times 1 \times 5$

4. Find the prime factorization of 8640

- (i) $2^6 \times 1 \times 5$ (ii) $2^5 \times 3^3 \times 5$ (iii) $2^6 \times 3^3 \times 5$ (iv) $4^6 \times 3^3 \times 5$ (v) $2^7 \times 3^3 \times 5$

5. Find the prime factorization of 120

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

6. Find the prime factorization of 1536

- (i) $2^9 \times 3^2$ (ii) $2^8 \times 3$ (iii) $2^9 \times 3$ (iv) $4^9 \times 3$ (v) $(-1)^9 \times 3$

7. Find the prime factorization of 600

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

8. Find the prime factorization of 9720

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

9. Find the prime factorization of 2592

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

10. Find the prime factorization of 22680

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

Assignment Key

1) (iv)

2) (ii)

3) (iv)

4) (iii)

5) (v)

6) (iii)

7) (ii)

8) (i)

9) (i)

10) (iv)