EduSahara™ Assignment

Name : Prime Factorization

Chapter : Exponents

Grade : SSC Grade VII

1. Find the exponential notation of $\frac{64}{5}$

   (i) $\frac{2^5}{5}$ (ii) $\frac{2^6}{8}$ (iii) $\frac{2^6}{5}$ (iv) $\frac{2^6}{2}$ (v) $\frac{2^7}{5}$

2. Find the prime factorization of 1890

   (i) $2\times3\times5\times7$ (ii) $2\times3^2\times5\times7$ (iii) $2\times3^3\times5\times7$ (iv) $2^2\times3^3\times5\times7$ (v) $5\times3^3\times5\times7$

3. Find the prime factorization of 3456

   (i) $2^8\times3^3$ (ii) $2^7\times5^3$ (iii) $2^7\times3^3$ (iv) $2^7\times3$ (v) $2^6\times3^3$

4. Find the exponential notation of $\frac{32}{3}$

   (i) $\frac{2^4}{3}$ (ii) $\frac{2^6}{3}$ (iii) $\frac{2^5}{3}$ (iv) $\frac{2^5}{6}$ (v) $\frac{2^5}{3^{-1}}$

5. Find the prime factorization of 756

   (i) $2^2\times3^3\times5$ (ii) $2\times3^3\times7$ (iii) $2^2\times5^3\times7$ (iv) $2^2\times3^3\times7^2$ (v) $2^2\times3^3\times7$

6. Find the prime factorization of 19440

   (i) $2^4\times3^5\times4$ (ii) $4^4\times3^5\times5$ (iii) $2^4\times3^5\times5$ (iv) $2^4\times3^5\times5^2$ (v) $2^4\times3^2\times5$

7. Find the exponential notation of $\frac{45}{4}$

   (i) $\frac{3^2\times5}{2^2}$ (ii) $\frac{3^3\times5}{2^2}$ (iii) $\frac{3^2\times5}{(-1)^2}$ (iv) $\frac{3^2\times5}{4^2}$ (v) $\frac{3\times5}{2^2}$

8. Find the prime factorization of 486

   (i) $2^2\times3^5$ (ii) 2×3^5 (iii) 4×3^5 (iv) 1×3^5 (v) 2×1

9. Find the prime factorization of 68040

   (i) $2^3\times3^5\times7\times7$ (ii) $2^3\times3^5\times5\times7$ (iii) $2^3\times3^4\times5\times7$ (iv) $(-1)^3\times3^5\times5\times7$ (v) $2^4\times3^5\times5\times7$

10. Find the exponential notation of $\frac{192}{125}$

(i) $\frac{2^6 \times 3}{8^3}$ (ii) $\frac{2^7 \times 3}{5^3}$ (iii) $\frac{2^6 \times 3}{5^3}$ (iv) $\frac{2^6 \times 2}{5^3}$ (v) $\frac{2^6 \times 3}{3^3}$

11. Find the prime factorization of 108

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

12. Find the prime factorization of 20160

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

Assignment Key

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