EduSahara™ Assignment

Name : Expanded and Power Notation

Chapter : Exponents

Grade : SSC Grade VII

1. Find the exponential notation of
$6 \times 6 \times 6 \times 6 \times 6$

(i) 4^5 (ii) 9^5 (iii) 6^4 (iv) 6^6 (v) 6^5

2. Find the exponential notation of
$-3 \times -3 \times -3 \times -3$

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

3. Find the exponential notation of
$-17 \times -17 \times -17 \times -17 \times -17 \times -17$

(i) $(-17)^7$ (ii) $(-17)^5$ (iii) $(-14)^6$ (iv) $(-17)^6$ (v) $(-19)^6$

4. Find the exponential notation of
$17 \times 17 \times 17 \times 17 \times 17 \times 17 \times 17$

(i) 17^8 (ii) 15^7 (iii) 20^7 (iv) 17^6 (v) 17^7

5. Find the exponential notation of
$\frac{5}{2} \times \frac{5}{2} \times \frac{5}{2} \times \frac{5}{2}$

(i) $\left(\frac{7}{2}\right)^4$ (ii) $\left(\frac{5}{2}\right)^5$ (iii) $\left(\frac{5}{2}\right)^4$ (iv) $\left(\frac{5}{2}\right)^3$ (v) $\left(\frac{3}{2}\right)^4$

6. Find the exponential notation of
$\frac{19}{16} \times \frac{19}{16} \times \frac{19}{16}$

(i) $\left(\frac{17}{16}\right)^3$ (ii) $\left(\frac{19}{16}\right)^2$ (iii) $\left(\frac{21}{16}\right)^3$ (iv) $\left(\frac{19}{16}\right)^3$ (v) $\left(\frac{19}{16}\right)^4$

7. Find the exponential notation of
$\left(\frac{-3}{7}\right) \times \left(\frac{-3}{7}\right) \times \left(\frac{-3}{7}\right) \times \left(\frac{-3}{7}\right) \times \left(\frac{-3}{7}\right)$

(i) $\left(\frac{-1}{7}\right)^5$ (ii) $\left(\frac{-3}{7}\right)^4$ (iii) $\left(\frac{-3}{7}\right)^5$ (iv) $\left(\frac{-5}{7}\right)^5$ (v) $\left(\frac{-3}{7}\right)^6$

Find the exponential notation of

8. $(\frac{-14}{11}) \times (\frac{-14}{11}) \times (\frac{-14}{11}) \times (\frac{-14}{11}) \times (\frac{-14}{11}) \times (\frac{-14}{11}) \times (\frac{-14}{11})$

(i) $\left(\frac{-14}{11}\right)^{7}$ (ii) $\left(\frac{-16}{11}\right)^{7}$ (iii) $\left(\frac{-14}{11}\right)^{6}$ (iv) $\left(\frac{-12}{11}\right)^{7}$ (v) $\left(\frac{-14}{11}\right)^{8}$

9. Expand the following base power 5^{3}

(i) 25 (ii) 625 (iii) 343 (iv) 125 (v) 8

10. Expand the following base power 3^{-5}

(i) $\frac{1}{81}$ (ii) $\frac{1}{729}$ (iii) $\frac{1}{2187}$ (iv) $\frac{1}{243}$ (v) $\frac{1}{3125}$

11. Expand the following base power $(-4)^{3}$

(i) 16 (ii) -343 (iii) -1 (iv) -64 (v) 256

12. Expand the following base power $(-4)^{-2}$

(i) $\frac{1}{4}$ (ii) $\frac{1}{49}$ (iii) $(\frac{-1}{64})$ (iv) $(\frac{-1}{4})$ (v) $\frac{1}{16}$

13. Expand the following base power $\left(\frac{1}{4}\right)^{4}$

(i) $\frac{1}{1024}$ (ii) $\frac{81}{256}$ (iii) $\frac{1}{256}$ (iv) $\frac{1}{64}$

14. Expand the following base power $\left(\frac{2}{5}\right)^{-5}$

(i) $\frac{3125}{32}$ (ii) $\frac{625}{16}$ (iii) $\frac{78125}{128}$ (iv) $\frac{3125}{1024}$ (v) $\frac{15625}{64}$

15. Expand the following base power $\left(\frac{-1}{4}\right)^{5}$

(i) $(\frac{-243}{1024})$ (ii) $(\frac{-1}{1024})$ (iii) $\frac{1}{256}$ (iv) $\frac{1}{4096}$ (v) $\frac{1}{1024}$

16. Expand the following base power $\left(\frac{-3}{4}\right)^{-2}$

(i) $\frac{16}{9}$ (ii) $(\frac{-4}{3})$ (iii) $\frac{16}{25}$ (iv) 16 (v) $(\frac{-64}{27})$

17. Find the exponential notation of $(\frac{-3}{32})$

(i) $\frac{-1\times3}{2^5}$ (ii) $\frac{-1\times2}{2^5}$ (iii) $\frac{-1\times3}{2^2}$ (iv) $\frac{-1\times3}{5^5}$ (v) $\frac{(-1)^2\times3}{2^5}$

18. Find the exponential notation of $\frac{8}{15}$

(i) $\frac{2^3}{3\times5}$ (ii) $\frac{2^3}{5\times5}$ (iii) $\frac{2^2}{3\times5}$ (iv) $\frac{2^3}{3^{-2}\times5}$ (v) $\frac{2^4}{3\times5}$

19. Find the exponential notation of $(\frac{-49}{486})$

(i) $\frac{(-1)^2\times7^2}{2\times3^5}$ (ii) $\frac{-2\times7^2}{2\times3^5}$ (iii) $\frac{-1\times7^2}{2\times3^5}$ (iv) $\frac{-1\times7^2}{2\times6^5}$ (v) $\frac{-1\times7^2}{2\times1}$

20. Find the exponential notation of $(\frac{-1008}{5})$

(i) $\frac{-1\times2^4\times3^3\times7}{5}$ (ii) $\frac{-1\times2^4\times3^2\times7}{5}$ (iii) $\frac{-1\times2^4\times3^2\times7}{2}$ (iv) $\frac{-1\times2^4\times3\times7}{5}$ (v) $\frac{-1\times2^4\times3^2\times7}{7}$

21. Find the exponential notation of $\frac{12}{25}$

(i) $\frac{2^2\times3}{8^2}$ (ii) $\frac{2^2\times3}{5^2}$ (iii) $\frac{2^2\times3}{2^2}$ (iv) $\frac{2^3\times3}{5^2}$ (v) $\frac{2^2\times2}{5^2}$

22. Find the exponential notation of $(\frac{-81}{784})$

(i) $\frac{-1\times3^4}{2^4\times7^2}$ (ii) $\frac{-2\times3^4}{2^4\times7^2}$ (iii) $\frac{-1\times3^5}{2^4\times7^2}$ (iv) $\frac{-1\times3^4}{2^4\times9^2}$ (v) $\frac{-1\times3^4}{2^4\times5^2}$

23. Find the exponential notation of $(\frac{-24}{5})$

(i) $\frac{-1\times2^3\times3}{2}$ (ii) $\frac{-1\times2^2\times3}{5}$ (iii) $\frac{-1\times2^3\times3^2}{5}$ (iv) $\frac{-1\times2^3\times3}{8}$ (v) $\frac{-1\times2^3\times3}{5}$

24. Find the prime factorization of -2

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

Assignment Key

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