



1. $(-5 \times -2)^{6/5} =$

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

2. Represent the given large number in scientific form
-2343536000

- (i) -2.343536×10^{11} (ii) -2.343536×10^{10} (iii) -2.343536×10^8 (iv) -2.343536×10^7 (v) -2.343536×10^9

3. Find the reciprocal of 8^2

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

4. If $3^{(5c+3)} = 9^{(2c+5)}$, find c

- (i) 6 (ii) 7 (iii) 4 (iv) 8 (v) 9

5. $6^0 =$

- (i) undefined (ii) ∞ (iii) 1 (iv) -1 (v) 0

6. Find the value of $(\frac{-2}{3})^{-5}$

- (i) $(\frac{-243}{34})$ (ii) $(\frac{-243}{32})$ (iii) $(\frac{-81}{10})$ (iv) $(\frac{-241}{32})$ (v) $(\frac{-245}{32})$

7. $-1^4 =$

- (i) undefined (ii) -1 (iii) 1 (iv) ∞ (v) 0

8. $[(5^4)^2 \times (5^5)^3] \div 5^{23}$

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

$$(-5/6)$$

9. $\left(\frac{-4}{5}\right)^{(-5/6)} =$

- (i) $\left(\frac{-5}{4}\right)^{(5/4)}$ (ii) $\left(\frac{-5}{4}\right)^{(5/8)}$ (iii) $\left(\frac{-5}{4}\right)^{(5/6)}$ (iv) $\left(\frac{-7}{4}\right)^{(5/6)}$ (v) $\left(\frac{-3}{4}\right)^{(5/6)}$

10. If $4^j = 256$, find j

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

11. Simplify the expression $9^5 \times 9^3$

- (i) 12^8 (ii) 6^8 (iii) 9^7 (iv) 9^9 (v) 9^8

12. The multiplicative inverse of 9^{-6} is

- (i) $\left(\frac{1}{9}\right)^6$ (ii) $(-9)^{-6}$ (iii) 1 (iv) 9^6 (v) 0

13. Simplify $6^{-1} + 4^0 + 9^1 + 3^{-1}$

- (i) $\frac{21}{2}$ (ii) 11 (iii) $\frac{23}{2}$ (iv) $\frac{19}{2}$ (v) $\frac{41}{4}$

Represent the given large number in standard form

14. 8095965000×10^4

- (i) 8.095965×10^{14} (ii) 8.095965×10^{15} (iii) 8.095965×10^{13} (iv) 8.095965×10^{12} (v) 8.095965×10^{11}

15. The value of $\left(\frac{3}{2}\right)^3 + \left(\frac{3}{2}\right)^2$

- (i) $\frac{15}{2}$ (ii) $\frac{43}{8}$ (iii) $\frac{45}{8}$ (iv) $\left(\frac{45}{8}\right)^2$ (v) $\frac{47}{8}$

16. If $\left(3^{200}\right)^{12} = \left(3^{32}\right)^r$, find r

- (i) 76 (ii) 74 (iii) 78 (iv) 75 (v) 72

17. $-9^0 =$

- (i) undefined (ii) -1 (iii) 1 (iv) 0 (v) ∞

18. Simplify $\left(u^{(f+g)}\right)^{(f-g)}\left(u^{(g+h)}\right)^{(g-h)}\left(u^{(h+f)}\right)^{(h-f)}$

- (i) u (ii) 1 (iii) $u^{(f+g+h)}$ (iv) 0 (v) -1

19. Find the exponential notation of $18 \times 18 \times 18$

- (i) 18^4 (ii) 18^2 (iii) 16^3 (iv) 20^3 (v) 18^3

20. $\sqrt{\frac{169}{196}} =$

- (i) $\frac{11}{14}$ (ii) $\frac{13}{16}$ (iii) $\frac{13}{14}$ (iv) $\frac{15}{14}$ (v) $\frac{13}{12}$

21. The value of $\left(\frac{-1}{3}\right)^3 \div \left(\frac{-1}{3}\right)^2$

- (i) $\frac{1}{3}$ (ii) $\left(\frac{-1}{3}\right)^2$ (iii) $\left(\frac{-1}{3}\right)$ (iv) -1

22. If $c^w = d$, $d^x = e$ and $e^y = c$, then $wxy =$

- (i) 0 (ii) -1 (iii) 1 (iv) cde (v) $(c+d+e)$

23. Expand the following base power 5^{-5}

- (i) $\frac{1}{3125}$ (ii) $\frac{1}{625}$ (iii) $\frac{1}{16807}$ (iv) $\frac{1}{15625}$ (v) $\frac{1}{243}$

Find the exponential notation of

24. $\frac{16}{15} \times \frac{16}{15} \times \frac{16}{15} \times \frac{16}{15} \times \frac{16}{15} \times \frac{16}{15} \times \frac{16}{15} \times \frac{16}{15} \times \frac{16}{15}$

- (i) $\left(\frac{16}{15}\right)^7$ (ii) $\left(\frac{14}{15}\right)^8$ (iii) $\left(\frac{16}{15}\right)^8$ (iv) $\left(\frac{6}{5}\right)^8$ (v) $\left(\frac{16}{15}\right)^9$

Find the exponential notation of

25. $\left(\frac{-2}{3}\right) \times \left(\frac{-2}{3}\right) \times \left(\frac{-2}{3}\right) \times \left(\frac{-2}{3}\right)$

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

Assignment Key

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