



1. The base in the term 4^6 is

- (i) 4 (ii) -6 (iii) -4 (iv) 6 (v) 2

2. The exponent in the term 9^6 is

- (i) 9 (ii) 3 (iii) -9 (iv) -6 (v) 6

3. The power in the term 2^4 is

- (i) 4 (ii) 1 (iii) -2 (iv) -4 (v) 2

8

4. The base in the term $\left(\frac{7}{6}\right)^8$ is

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

7

5. The exponent in the term $\left(\frac{5}{3}\right)^7$ is

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

5

6. The power in the term $\left(\frac{9}{2}\right)^5$ is

- (i) -5 (ii) $\frac{9}{2}$ (iii) 5 (iv) 2 (v) $\left(\frac{-9}{2}\right)$

7. Simplify the expression $5^7 \times 5^7$

- (i) 8^{14} (ii) 3^{14} (iii) 5^{15} (iv) 5^{14} (v) 5^{13}

8. Simplify the expression $(-4)^5 \times (-4)^5$

- (i) $(-4)^{10}$ (ii) $(-7)^{10}$ (iii) $(-1)^{10}$ (iv) $(-4)^9$ (v) $(-4)^{11}$

9. Simplify the expression $5^5 \times 5^6 \times 5^2$

- (i) 5^{12} (ii) 3^{13} (iii) 7^{13} (iv) 5^{13} (v) 5^{14}

10. Simplify the expression $(-4)^2 \times (-4)^5$

- (i) $(-4)^8$ (ii) $(-2)^7$ (iii) $(-6)^7$ (iv) $(-4)^6$ (v) $(-4)^7$

11. Simplify the expression $6^9 \times 6^9 \times 7^9$

- (i) 252^8 (ii) 250^9 (iii) 252^{10} (iv) 254^9 (v) 252^9

12. Simplify the expression $(-9)^7 \times (-6)^7$

- (i) 54^7 (ii) 52^7 (iii) 57^7 (iv) 54^8 (v) 54^6

13. Expand the following base power 3^3

- (i) 9 (ii) 3 (iii) 216 (iv) 81 (v) 27

14. Expand the following base power $(-2)^5$

- (i) -3125 (ii) -32 (iii) 64 (iv) 16 (v) 256

15. Find the exponential notation of

$$2 \times 2 \times 2 \times 2 \times 2$$

- (i) 2^6 (ii) 2^5 (iii) 2^4 (iv) 2^2 (v) 5^5

16. Find the exponential notation of

$$-6 \times -6 \times -6 \times -6 \times -6 \times -6$$

- (i) $(-8)^6$ (ii) $(-6)^7$ (iii) $(-6)^5$ (iv) $(-3)^6$ (v) $(-6)^6$

17. Find the exponential notation of

$$-19 \times -19 \times -19 \times -19 \times -19$$

- (i) $(-19)^4$ (ii) $(-17)^5$ (iii) $(-21)^5$ (iv) $(-19)^5$ (v) $(-19)^6$

18. Find the exponential notation of

$$11 \times 11 \times 11 \times 11 \times 11$$

- (i) 9^5 (ii) 11^6 (iii) 11^4 (iv) 13^5 (v) 11^5

Find the exponential notation of

$$\frac{7}{3} \times \frac{7}{3} \times \frac{7}{3} \times \frac{7}{3} \times \frac{7}{3} \times \frac{7}{3} \times \frac{7}{3} \times \frac{7}{3}$$

- (i) $\left(\frac{7}{3}\right)^8$ (ii) $\left(\frac{7}{3}\right)^9$ (iii) $\left(\frac{7}{3}\right)^7$ (iv) $\left(\frac{5}{3}\right)^8$ (v) 3^8

Find the exponential notation of

20. $\frac{18}{17} \times \frac{18}{17} \times \frac{18}{17} \times \frac{18}{17}$

- (i) $\left(\frac{16}{17}\right)^4$ (ii) $\left(\frac{20}{17}\right)^4$ (iii) $\left(\frac{18}{17}\right)^3$ (iv) $\left(\frac{18}{17}\right)^4$ (v) $\left(\frac{18}{17}\right)^5$

Find the exponential notation of

21. $\left(\frac{-5}{7}\right) \times \left(\frac{-5}{7}\right) \times \left(\frac{-5}{7}\right) \times \left(\frac{-5}{7}\right)$

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

Find the exponential notation of

22. $\left(\frac{-19}{12}\right) \times \left(\frac{-19}{12}\right) \times \left(\frac{-19}{12}\right)$

- (i) $\left(\frac{-19}{12}\right)^2$ (ii) $\left(\frac{-19}{12}\right)^4$ (iii) $\left(\frac{-17}{12}\right)^3$ (iv) $\left(\frac{-19}{12}\right)^3$ (v) $\left(\frac{-7}{4}\right)^3$

23. $-1^{10} =$

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

24. $-1^7 =$

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

25. $10^0 =$

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

26. $0^0 =$

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

27. $-4^0 =$

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

28. $0^1 =$

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

Assignment Key

| | | | | | |
|---------|-----------|----------|----------|----------|----------|
| 1) (i) | 2) (v) | 3) (i) | 4) (iii) | 5) (iv) | 6) (iii) |
| 7) (iv) | 8) (i) | 9) (iv) | 10) (v) | 11) (v) | 12) (i) |
| 13) (v) | 14) (ii) | 15) (ii) | 16) (v) | 17) (iv) | 18) (v) |
| 19) (i) | 20) (iv) | 21) (i) | 22) (iv) | 23) (iv) | 24) (iv) |
| 25) (i) | 26) (iii) | 27) (v) | 28) (v) | | |

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