

Exponent Rules

1. $a^n \cdot a^m = a^{n+m}$

2. $a^n \cdot b^n = (a \cdot b)^n$

3. $\frac{a^n}{a^m} = a^{n-m}$

4. $\frac{a^n}{b^n} = \left(\frac{a}{b}\right)^n$

5. $(a^n)^m = a^{n \cdot m}$

6. $a^{n^m} = a^{(n^m)}$

7. $a^{1/n} = \sqrt[n]{a}$

8. $a^{-n} = \frac{1}{a^n}$

9. $a^0 = 1$

10. $0^n = 0$

11. $a^1 = a$

12. $1^n = 1$