

5 Properties of Exponents

Product of Powers Property $a^m \cdot a^n = a^{m+n}$

Quotient of Powers Property $\frac{a^m}{a^n} = a^{m-n} \quad a \neq 0$

Power of a Power Property $(a^m)^n = a^{mn}$

Zero Exponent Property $a^0 = 1 \quad a \neq 0$

Negative Exponent Property $a^{-m} = \frac{1}{a^m} \quad a \neq 0$