

Exponents And Power

Laws of Exponents

Here are the laws of exponents when a and b are non-zero integers and m, n are any integers.

$$a^{-m} = 1/a^m$$

$$a^m / a^n = a^{m-n}$$

$$(a^m)^n = a^{mn}$$

$$a^m \times b^m = (ab)^m$$

$$a^m / b^m = (a/b)^m$$

$$a^0 = 1$$

$$(a/b)^{-m} = (b/a)^m$$

$$(1)^n = 1 \text{ for infinitely many } n.$$

$$(-1)^p = 1 \text{ for any even integer } p$$