

Power of a Power

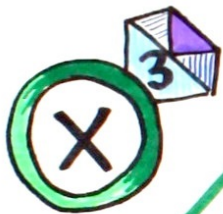
$$(a^m)^n = a^{mn}$$

Power of a Product

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

Product of Powers

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



PROPERTIES
of

exponents

Quotient of Powers

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

Zero Exponent

$$a^0 = 1$$

Negative

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

Power of a Quotient

$$\left(\frac{a}{b}\right)^m = \frac{a^m}{b^m}$$