

Laws of Exponents

$$(x^a)^b = x^{(ab)} \quad (1)$$

$$x^a * x^b = x^{a+b} \quad (2)$$

$$\frac{x^a}{x^b} = x^{a-b} \quad (3)$$

$$x^a y^b = (xy)^a \quad (4)$$

$$\left(\frac{x}{y}\right)^a = \frac{x^a}{y^a} \quad (5)$$