

СТЕПЕНИ

$$a^n = \underbrace{a.a\dots a}_n$$

$$a^0 = 1, a \neq 0$$

$$a^n . a^m = a^{n+m}$$

$$(a.b)^n = a^n . b^n$$

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

$$\frac{a^m}{a^n} = \frac{1}{a^{n-m}}, n > m$$

$$2^5 = 2.2.2.2.2 = 32$$

$$(-5,38)^0 = 1$$

$$5^3 . 5^8 = 5^{11}$$

$$(2.3)^4 = 2^4 . 3^4$$

$$4^{15} : 4^3 = 4^{12}$$

$$4^3 : 4^{15} = \frac{1}{4^{12}}$$

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

$$(2^3)^4 = 2^{3.4} = 2^{12}$$

$$a^n . b^n = (a.b)^n$$

$$(-0,25)^3 . 4^3 = (-0,25.4)^3 = (-1)^3 = -1$$

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

$$\frac{12^4}{6^4} = \left(\frac{12}{6}\right)^4 = 2^4 = 16$$

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

$$\left(\frac{9}{10}\right)^2 = \frac{9^2}{10^2} = \frac{81}{100}$$

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

$$2^{-5} = \frac{1}{2^5}$$

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

$$\left(\frac{9}{10}\right)^{-2} = \left(\frac{10}{9}\right)^2$$