

Matematičke formule za prvi razred srednje škole
POTENCIJE

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

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

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

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

$$(a^n)^m = a^{n \cdot m}$$

$$\left((a^n)^m \right)^z = a^{n \cdot m \cdot z}$$

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

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

$$a^0 = 1$$

$$a^1 = a$$

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

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

ALGEBARSKI IZRAZI

$$(a + b)^2 = (a + b) \cdot (a + b) = a^2 + 2ab + b^2$$

$$(a + b)^2 = (b + a)^2$$

$$(a - b)^2 = (a - b) \cdot (a - b) = a^2 - 2ab + b^2$$

$$(a - b)^2 = (b - a)^2$$

$$(-a - b)^2 = (a + b)^2$$

$$(a - b) \cdot (a + b) = a^2 - b^2$$

$$(a + b)^3 = a^3 + 3a^2b + 3ab^2 + b^3$$

$$(a - b)^3 = a^3 - 3a^2b + 3ab^2 - b^3$$

$$a^3 - b^3 = (a - b) \cdot (a^2 + ab + b^2)$$

$$a^3 + b^3 = (a + b) \cdot (a^2 - ab + b^2)$$

$$(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2ac + 2bc$$

$$x^2 + px + q = \left\{ \begin{array}{l} m + n = p \\ m \cdot n = q \end{array} \right\} = (x + m) \cdot (x + n)$$

$$ax^2 + bx + c = \left\{ \begin{array}{l} m + n = b \\ m \cdot n = a \cdot c \end{array} \right\} = ax^2 + mx + nx + c = \dots$$

