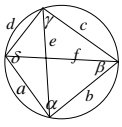


Racionalizacija nazivnika kod korijena	
1.	$\frac{a}{\sqrt{b}} = \frac{a}{\sqrt{b}} \cdot \frac{\sqrt{b}}{\sqrt{b}} = \dots$
2.	$\frac{a}{\sqrt{a+\sqrt{b}}} = \frac{a}{\sqrt{a+\sqrt{b}}} \cdot \frac{\sqrt{a-\sqrt{b}}}{\sqrt{a-\sqrt{b}}} = \dots$
3.	$\frac{a}{\sqrt{a-\sqrt{b}}} = \frac{a}{\sqrt{a-\sqrt{b}}} \cdot \frac{\sqrt{a+\sqrt{b}}}{\sqrt{a+\sqrt{b}}} = \dots$
4.	$\frac{a}{\sqrt{a-\sqrt{b}}} = \frac{a}{\sqrt{a-\sqrt{b}}} \cdot \frac{\sqrt{a-\sqrt{b}}}{\sqrt{a-\sqrt{b}}} = \dots$
5.	$\frac{a}{\sqrt{a+\sqrt{b}}} = \frac{a}{\sqrt{a+\sqrt{b}}} \cdot \frac{\sqrt{a-\sqrt{b}}}{\sqrt{a-\sqrt{b}}} = \dots$
6.	$\frac{a}{\sqrt{\sqrt{a+\sqrt{b}}}} = \frac{a}{\sqrt{\sqrt{a+\sqrt{b}}}} \cdot \frac{\sqrt{\sqrt{a+\sqrt{b}}}}{\sqrt{\sqrt{a+\sqrt{b}}}} = \dots$
	$\frac{a}{\sqrt{\sqrt{a-\sqrt{b}}}} = \frac{a}{\sqrt{\sqrt{a-\sqrt{b}}}} \cdot \frac{\sqrt{\sqrt{a-\sqrt{b}}}}{\sqrt{\sqrt{a-\sqrt{b}}}} = \dots$
7.	$\frac{a}{\sqrt{\sqrt{a-\sqrt{b}}}} = \frac{a}{\sqrt{\sqrt{a-\sqrt{b}}}} \cdot \frac{\sqrt{\sqrt{a-\sqrt{b}}}}{\sqrt{\sqrt{a-\sqrt{b}}}} = \dots$
	$\frac{a}{\sqrt{\sqrt{a-\sqrt{b}}}} = \frac{a}{\sqrt{\sqrt{a-\sqrt{b}}}} \cdot \frac{\sqrt{\sqrt{a+\sqrt{b}}}}{\sqrt{\sqrt{a+\sqrt{b}}}} = \dots$
8.	$\frac{1}{\sqrt[3]{a \pm \sqrt[3]{b}}} = \frac{1}{\sqrt[3]{a \pm \sqrt[3]{b}}} \cdot \frac{\sqrt[3]{a^2 \mp \sqrt[3]{ab} + \sqrt[3]{b^2}}{\sqrt[3]{a^2 \mp \sqrt[3]{ab} + \sqrt[3]{b^2}}} = \dots$
9.	$\frac{1}{\sqrt[3]{a^2 \pm \sqrt[3]{ab} + \sqrt[3]{b^2}}} = \frac{1}{\sqrt[3]{a^2 \pm \sqrt[3]{ab} + \sqrt[3]{b^2}}} \cdot \frac{\sqrt[3]{a \mp \sqrt[3]{b}}}{\sqrt[3]{a \mp \sqrt[3]{b}}} = \dots$

Tetivni četverokut



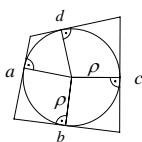
$$c \cdot f = a \cdot c + b \cdot d$$

$$\alpha + \gamma = \beta + \delta = 180^\circ$$

$$P = \sqrt{(s-a)(s-b)(s-c)(s-d)}$$

$$o = a + b + c + d = 2s$$

Tangencijalni četverokut



$$P = \rho \cdot s = \frac{o}{2} \cdot \rho$$

$$o = a + b + c + d = 2s$$

$$a + c = b + d$$

$x^2$	
$1^2 = 1$	$10^2 = 100$
$2^2 = 4$	$11^2 = 121$
$3^2 = 9$	$12^2 = 144$
$4^2 = 16$	$13^2 = 169$
$5^2 = 25$	$14^2 = 196$
$6^2 = 36$	$15^2 = 225$
$7^2 = 49$	$16^2 = 256$
$8^2 = 64$	$(-1)^2 = 1$
$9^2 = 81$	$(-2)^2 = 4$
$x^3$	
$1^3 = 1$	$8^3 = 512$
$2^3 = 8$	$9^3 = 729$
$3^3 = 27$	$10^3 = 1000$
$4^3 = 64$	$11^3 = 1331$
$5^3 = 125$	$(-1)^3 = -1$
$6^3 = 216$	$(-2)^3 = -8$
$7^3 = 343$	$(-3)^3 = -27$
$x^4$	
$1^4 = 1$	$1^5 = 1$
$2^4 = 16$	$2^5 = 32$
$3^4 = 81$	$3^5 = 243$
$4^4 = 256$	$4^5 = 1024$
$5^4 = 625$	$5^5 = 3125$
$6^4 = 1296$	$6^5 = 7776$
$(-1)^4 = 1$	$(-1)^5 = -1$
$(-2)^4 = 16$	$(-2)^5 = -32$
$x^6$	
$1^6 = 1$	$1^7 = 1$
$2^6 = 64$	$2^7 = 128$
$3^6 = 729$	$3^7 = 2187$
$4^6 = 4096$	$4^7 = 16384$
$5^6 = 15625$	$5^7 = 78125$
$6^6 = 46656$	$6^7 = 279936$
$(-1)^6 = 1$	$(-1)^7 = -1$
$(-2)^6 = 64$	$(-2)^7 = -128$

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## MATEMATIČKE FORMULE ZA PRVI RAZRED SREDNJE ŠKOLE

### ALGEBARSKI IZRAZI

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

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

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

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

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

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

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

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

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

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

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

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

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

### POTENCije

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

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

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

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

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

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

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

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

$$a^0 = 1$$

$$a^1 = a$$

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

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

$$a^{\frac{1}{n}} = \sqrt[n]{a}$$

$$a^{-\frac{1}{n}} = \frac{1}{a^{\frac{1}{n}}} = \frac{1}{\sqrt[n]{a}}$$

$$a^{\frac{m}{n}} = \sqrt[n]{a^m}$$

$$a^{-\frac{m}{n}} = \frac{1}{a^{\frac{m}{n}}} = \frac{1}{\sqrt[n]{a^m}}$$

$$\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{a \cdot b}$$

$$\sqrt[n]{a} : \sqrt[n]{b} = \sqrt[n]{a : b}$$

### KORIjENI

$$\left( \sqrt[n]{a^m} \right)^p = \sqrt[n]{a^{m \cdot p}}$$

$$\left( \sqrt[n]{a} \right)^n = \sqrt[n]{a^n} = a$$

$$2\sqrt[n]{a} = \pm \sqrt[n]{2^n a}$$

$$2^{n+1}\sqrt[n]{-a} = -2\sqrt[n]{-a}$$

$$\sqrt[n]{0} = 0, \sqrt[n]{1} = 1$$

$$\sqrt[m]{\sqrt[n]{a}} = \sqrt[m \cdot n]{a}$$

$$\left( \sqrt[n]{a} \right)^m = \sqrt[n]{a^m}$$

$$\sqrt[n]{\frac{a}{b}} = \frac{\sqrt[n]{a}}{\sqrt[n]{b}}$$

$$\sqrt[m]{a^n} = \sqrt[m \cdot n]{a^{n \cdot x}}$$

$$\sqrt[n]{a^n} = \sqrt[m \cdot n]{a^{n \cdot x}}$$

$$\sqrt[n]{a^{n \cdot p} b} = a^p \cdot \sqrt[n]{b}$$