FORMULE

Polmer včt. kroga: r = $\frac{ss}{SS}$

Polmer očt. kroga: R = $\frac{abcabc}{4S\ \ 4S}$

Kosinusni izrek: $c^2 = a^2 + b^2 - 2ab \times sin\gamma\ c^2 = a^2 + b^2 - 2ab \times sin\gamma$

Sinusni izrek: $2R = \frac{a}{sin\alpha} = \frac{b}{sin\beta} = \frac{c}{sin\gamma}\ 2R = \frac{a}{sin\alpha} = \frac{b}{sin\beta} = \frac{c}{sin\gamma}$

Pravokotnik: $o = 2(a+b)\ o = 2(a+b)\ \ S = abS = ab\ \ d = \sqrt{a^2+b^2}d = \sqrt{a^2+b^2}$, ,

Kvadrat: $o = 4a,\ S = a^2, d = a\sqrt{2}o = 4a,\ S = a^2, d = a\sqrt{2}$

Paralelogram: $o = 2(a+b), S = a \times V_a - b \times V_b\ = ab \times sin \propto$

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Trikotnik poljubni: $o = a+b+c, S = \frac{a*V_a}{2} = \frac{b*V_b}{2} = \frac{c*V_c}{2} = \frac{ab*sin\gamma}{2} = \frac{ac*sin\beta}{2} = \frac{bc*sin\alpha}{2}$

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Enakostranični trikotnik: $o = 3a, S = \frac{a^2\sqrt{3}}{4}, v = \frac{a\sqrt{3}}{2}\ o = 3a, S = \frac{a^2\sqrt{3}}{4}, v = \frac{a\sqrt{3}}{2}$

Trapez: $o = a+b+c+d, S = \frac{a+b}{2} \times v\ o = a+b+c+d, S = \frac{a+b}{2} \times v$

Romb: $o = 4a, S = \frac{e*f}{2} = a \times V_a = a^2 \times sin \propto\ o = 4a, S = \frac{e*f}{2} = a \times V_a = a^2 \times sin \propto$

Deltoid: $o = 2(a+b), S = \frac{e*f}{2} = ab \times sin \propto : o = 2(a+b), S = \frac{e*f}{2} = ab \times sin \propto$

Pravilni n-kotnik: $\varphi = \frac{360}{n}.\ o = n \times a, S = \frac{n*a*r}{2} = \frac{n*R^2*sin\varphi}{2}$

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$$S = \pi r^2, o = 2\pi r = \frac{\pi r^2 \alpha}{360} S = \pi r^2, o = 2\pi r = \frac{\pi r^2 \alpha}{360}$$

Krog:

$$P = 2S + pl, V = S \times v \; P = 2S + pl, V = S \times v$$

Prizma:

$$D = \sqrt{a^2 + b^2 + c^2}, \; P = 2(ab + ac + bc), V = abc$$

Kvader:

$D = \sqrt{a^2 + b^2 + c^2}, \; P = 2(ab + ac + bc), V = abc$

$$D = a\sqrt{3}, \;\; P = 6a^2, V = a^3 D = a\sqrt{3}, \;\; P = 6a^2, V = a^3$$

Kocka:

$$P = 2\pi r \times (r + v), V = \pi r^2 \times v P = 2\pi r \times (r + v), V = \pi r^2 \times v$$

Valj:

$$S_{pl} = \pi r s, \; V = \frac{1}{3} \times \pi r^2 \times v, P = \pi r \times (r + s)$$

Stožec:

$S_{pl} = \pi r s, \; V = \frac{1}{3} \times \pi r^2 \times v, P = \pi r \times (r + s)$

$$P = 4\pi R^2, V = \frac{4}{3}\pi R^3 \; P = 4\pi R^2, V = \frac{4}{3}\pi R^3$$

Krogla:

$$V = \frac{S_o * v}{3}, P = S_o + S_{pl} \; V = \frac{S_o * v}{3}, P = S_o + S_{pl}$$

Piramida:

$$P = a^2\sqrt{3}, \; V = \frac{a^3\sqrt{2}}{12} P = a^2\sqrt{3}, \; V = \frac{a^3\sqrt{2}}{12}$$

Tetraeder:

$$V = \frac{v}{3} \times (O_1 + \sqrt{O_1 * O_2} + O_2 V = \frac{v}{3} \times (O_1 + \sqrt{O_1 * O_2} + O_2$$

Odsekana 3-strana piramida

$$S = \frac{\pi * R^2 * \alpha}{360} S = \frac{\pi * R^2 * \alpha}{360}$$

Krožnik izsek