

# ANALITIČKA GEOMETRIJA – formule – konike

	kružnica	elipsa	hiperbola	parabola
definicija	$d(T, S) = r$	$d(F_1, T) + d(T, F_2) = 2a$	$ d(F_1, T) - d(T, F_2)  = 2a$	$d(T, F) = d(T, d)$
jednadžba	$(x - p)^2 + (y - q)^2 = r^2$	$b^2x^2 + a^2y^2 = a^2b^2$	$b^2x^2 - a^2y^2 = a^2b^2$	$y^2 = 2px$
ekscentricitet ... linearni ... numerički	$\varepsilon = 0$	$e^2 = a^2 - b^2$ $\varepsilon = e/a < 1$	$e^2 = a^2 + b^2$ $\varepsilon = e/a > 1$	$\varepsilon = 1$
fokusi	$S = (p, q)$	$F = (\pm e, 0)$	$F = (\pm e, 0)$	$F = (p/2, 0)$
asimptote			$y = \pm bx/a$	
direktrise		$x = \pm a^2/e$	$x = \pm a^2/e$	$x = -p/2$
jednadžba tangente i polare	$(x_0 - p)(x - p) + (y_0 - q)(y - q) = r^2$	$b^2x_0x + a^2y_0y = a^2b^2$	$b^2x_0x - a^2y_0y = a^2b^2$	$y_0y = p(x_0 + x)$
uvjet dodira s pravcem $y = kx + l$	$r^2(k^2 + 1) = (q - kp - l)^2$	$a^2k^2 + b^2 = l^2$	$a^2k^2 - b^2 = l^2$	$p = 2kl$

