Parabola

(1) $ax^2 - 6x + 9 = 0$

$x_1 = x_2 = ?$ Find a = ?

$\Delta = b^2 - 4ac$

$\Delta = 0$

b = -6 c = 9

$\Delta = (-6)^2 - 4.a.9 = 36 - 36a = 0$

$36a = 36$

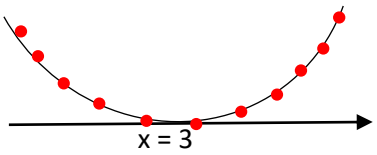
a = 1

$x^2 - 6x + 9 = 0$

$(x - 3)^2 = 0$

$x - 3 = 0$

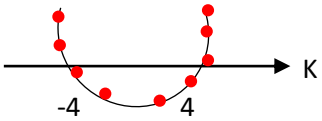
$x = 3$



$y = -x^2 + k.x - 4 < 0$, for all x

$\Delta = k^2 - 4.(-1)(-4) < 0$

$k^2 - 16 < 0$



Answer , $-4 < k < 4$