

Assignment 11

CS374

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October 17, 2019

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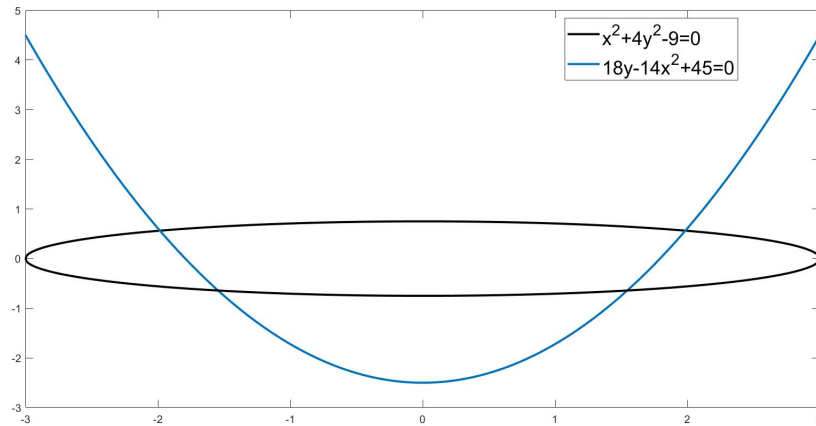
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1 Non Linear Systems and Newton method

$$f(x, y) = x^2 + 4y^2 - 9 = 0 \quad (1)$$

$$g(x, y) = 18y - 14x^2 + 45 = 0 \quad (2)$$

2 Graph



x_0	y_0	x	y	Iterations
-2	-1	-1.2032	-1.3741	4
1	2	2.1372	1.0527	5
-2	1	-2.1372	1.0527	3
1	-2	1.2032	-1.3741	4