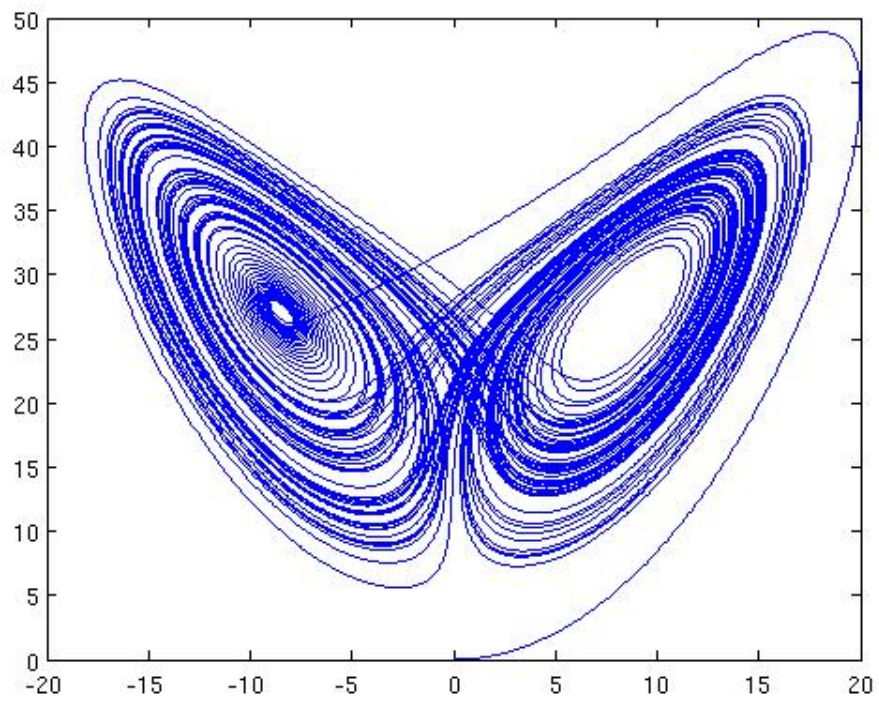
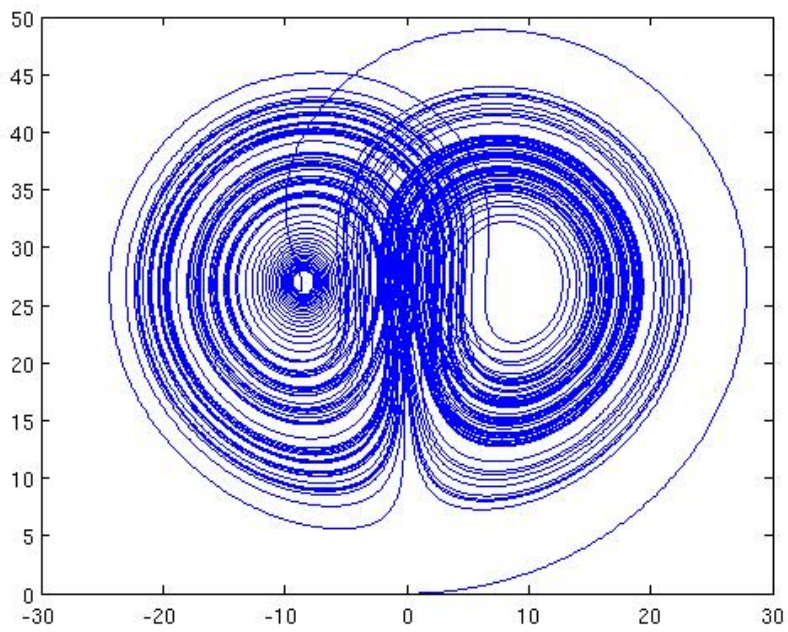


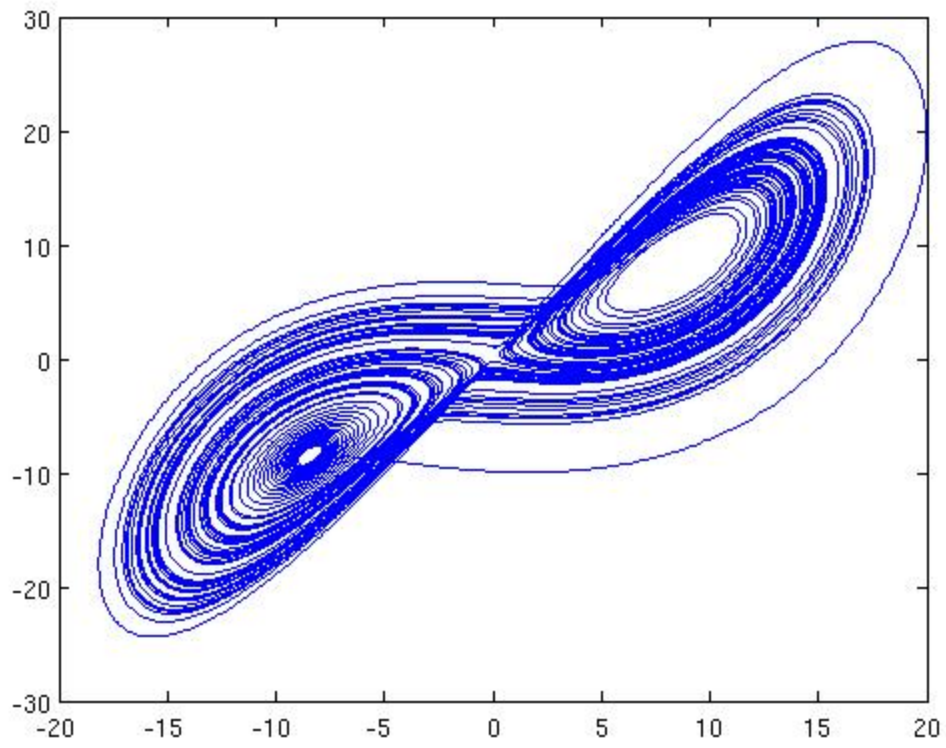
Part 2
y1 vs y3



y2 vs y3

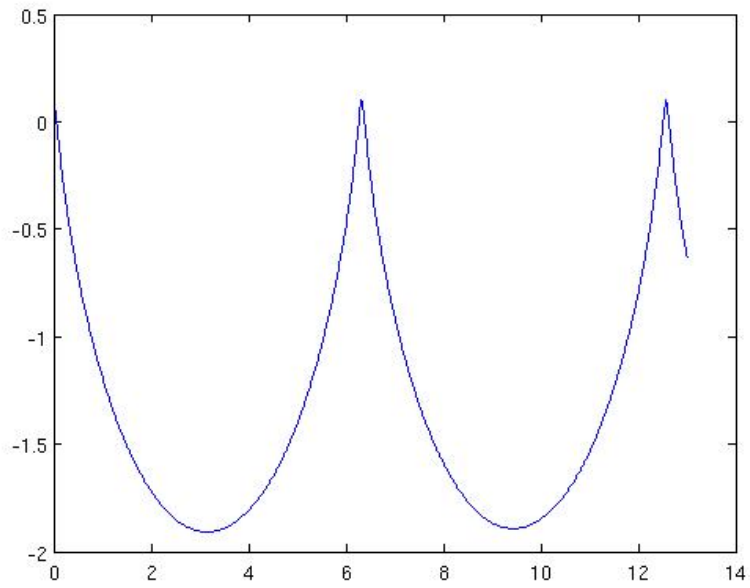


y1 vs y2

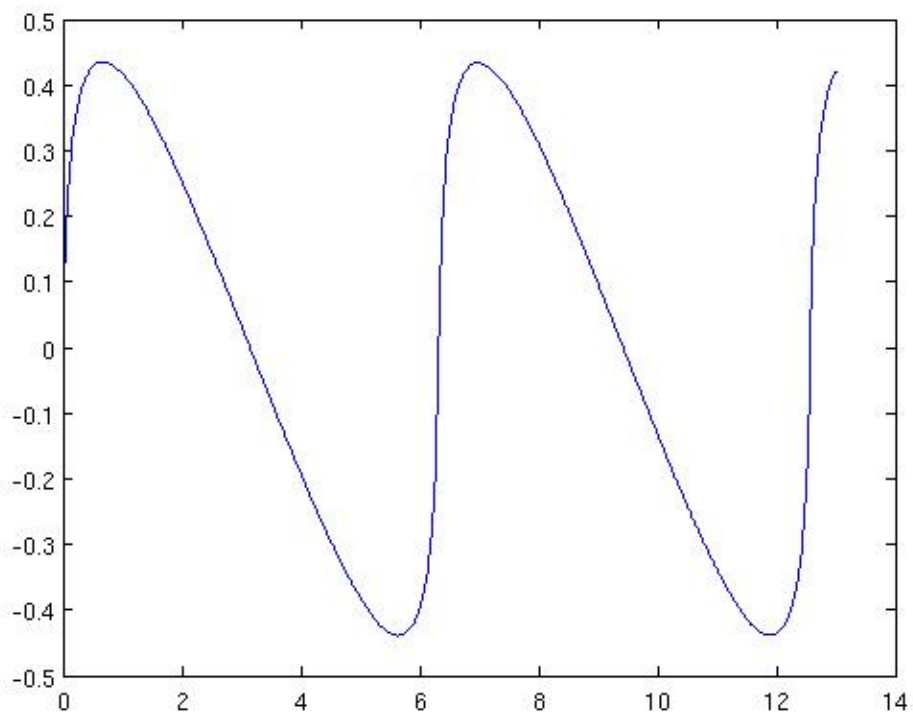


Part 3: plots for $e = 0, 0.5, 0.9$

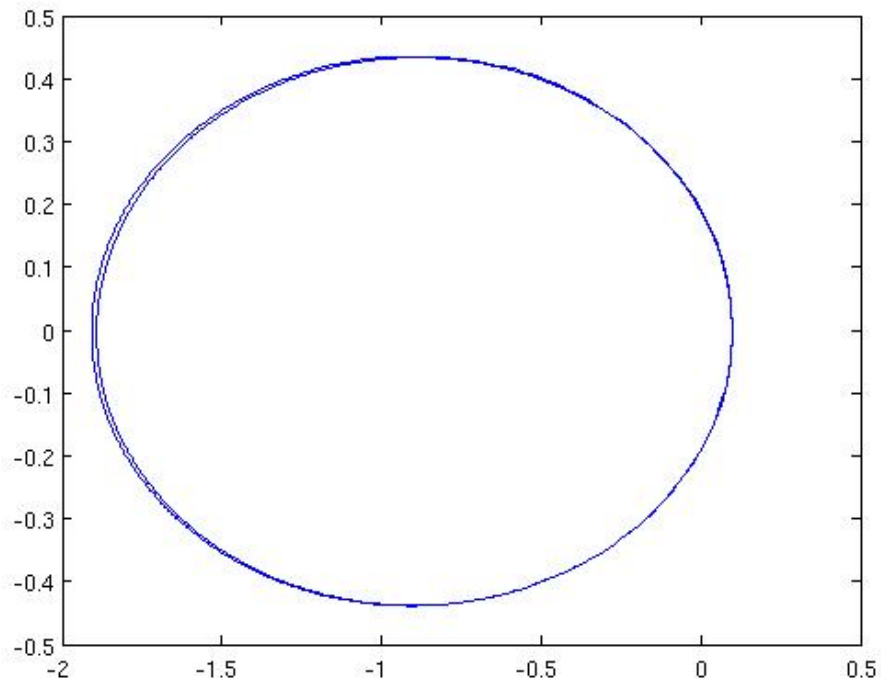
x vs t :



y vs t :



y vs x:



b.)

energy for each tolerance and eccentricity(Standard deviation):

0.5 = 2.086×10^{-3}

0.9 = 1.933×10^{-3}

angular momentum for each tolerance and eccentricity(Standard deviation):

0.5 = 4.169×10^{-4}

0.9 = 2.393×10^{-4}