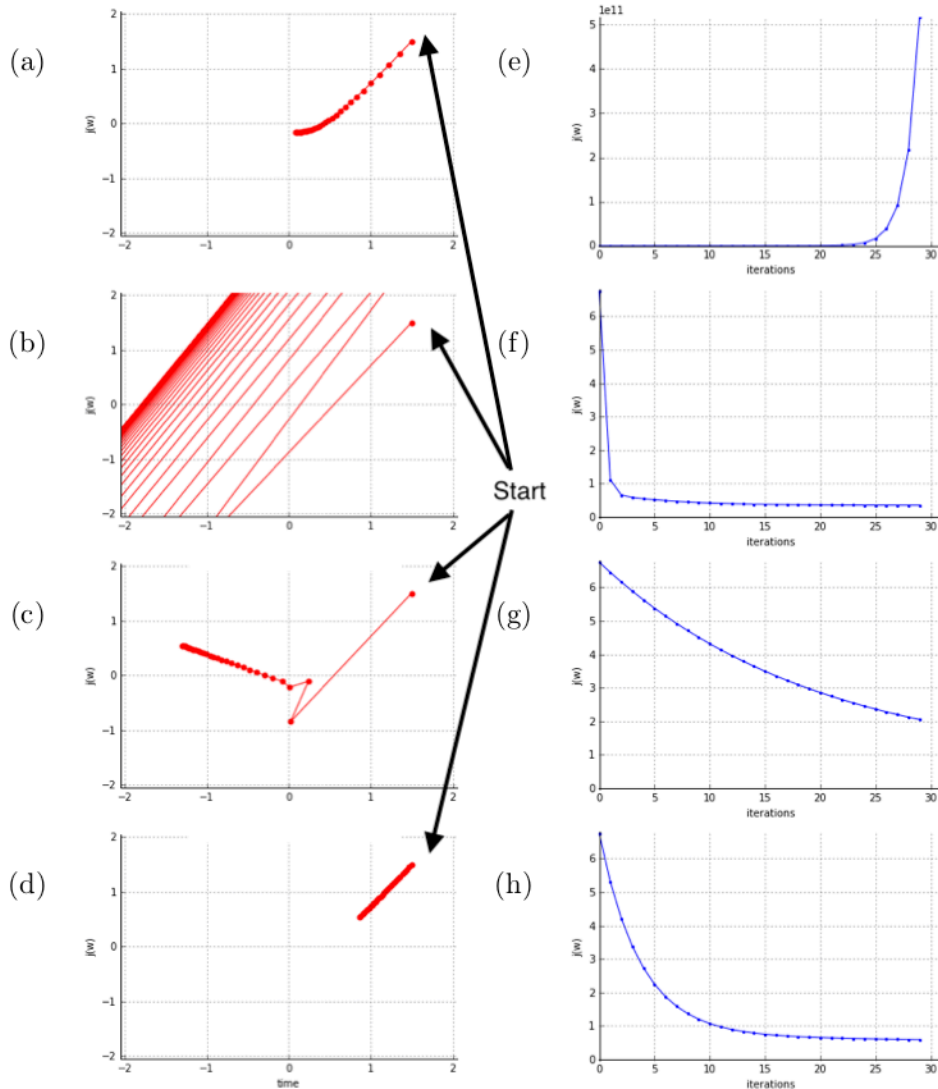# Fall 2017

9. (8 points) The following plots show the results of performing linear regression using gradient descent with fixed step size. The first column shows the trajectory of the weight vector as a function of iteration number; the second shows objective as a function of iteration number.

*Note that the weight vector is two dimensional. The column on the left shows that the starting value for all four plots is the same, w = [1.5, 1.5].

For each step size, specify the corresponding weight trajectory and objective plot.

(a) 0.01: Weight trajectory _____ Objective _____

(b) 0.05: Weight trajectory _____ Objective _____

(c) 0.50: Weight trajectory _____ Objective _____

(d) 1.00: Weight trajectory _____ Objective _____