

Problem 1

Model 2

Problem 2

Option 4:  $G = -y^*[x_1, x_2, 1]$ ,  $h = -1$

Problem 3

Model 1 due to the presence of lesser support vectors

Problem 4

The RBF kernel classifies the data the best

Problem 5

One vs One (since number of classifiers would be the same, smaller datasets in one vs one classification would lead to lower training times)

Problem 6

4 points that lie outside the margin