24-787: Machine Learning and Artificial Intelligence for Engineers

Ryan Wu

ID: weihuanw

Homework 3

Due: Feb 10 2024

**Concept Questions:**

Problem 1

1. False
2. True
3. True

Problem 2

1. The bounds on the values of h are , which is unbounded.
2. The bounds on the values of g(h) are 0 or 1, which is a sigmoid function.

Problem 3

False

Problem 4

Class D

Problem 5

When there are 2 or 3 classes, the number of classifiers required for one-versus-one and one-versus-rest classifiers are equal.

Problem 6

From the two output predictions, Model 1 Prediction is the best.