24-787: Machine Learning and Artificial Intelligence for Engineers

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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  $\pm \infty$ , 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.