Homework 4 Self-Grading

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1. Incorrect. I didn’t know what exactly was meant by ‘unstable’ and I think the answer given more clearly defines it as an issue where many possible values of the regression parameters could separate the two distributions.
2. Correct. I could have added more information regarding how flexibility is determined for each of these functions. For example, logistic regression’s flexibility is determined by the number of predictor variables, while LDA has no mechanism to manipulate the flexibility of the model. kNN uses a value *k* which determines the flexibility of the model: lower K = more flexible. These are pre-determined values.
3. Correct.
4. Correct.
5. (Applied):
   1. Correct
   2. Correct
   3. Correct
   4. Correct
   5. Correct
   6. Correct
   7. Correct
   8. Correct
   9. Correct
6. (Applied). In each correct case, I came to the same value for the test error rate.
   1. Correct
   2. Correct
   3. Correct
   4. Correct
   5. Correct
   6. Correct
   7. Correct