1. Logistic Regression
   1. x will vote for party A if

x will vote for party B if

x will vote for party A or B randomly when

* 1. The threshold T of the probability p must first be defined to obtain a decision boundary of a more general form

1. Logistic Regression
   1. z will approach argmax where zj approaches 0 for all j except the argmax will approach 1
   2. In contrast, z will approach the same uniform value, i.e., 1/K
   3. Case 1 ():  
      Case 2 ():  
      Combining the two cases, we have
2. Feedforward Neural Network
3. Convolutional Neural Networks
   1. Conv (128, 32, 7, 7, 2)

      2. Conv1 (128, 16, 1, 1, 1)
      3. Conv1 (128, 16, 1, 1, 1)
      4. Conv2 (16, 32, 7, 7, 2)
      5. Conv2 (16, 32, 7, 7, 2)
      6. Conv1 + Conv2
4. Principal Component Analysis
5. Clustering – Partitional Clustering
6. Clustering – Hierarchical Clustering