Formula Sheet – post-Test 1 material – STAT 530

$$d_{AB} = \min_{i \in A, j \in B} (d_{ij})$$

$$d_{AB} = \max_{i \in A, j \in B} (d_{ij})$$

$$d_{AB} = \frac{1}{n_A n_B} \sum_{i \in A} \sum_{j \in B} d_{ij}$$

where n_A and n_B are the number of objects in clusters A and B, respectively.

discriminant score $z = a_1 x_1 + a_2 x_2 + \cdots + a_q x_q$

$$P(Y = 1 | X_1, \ldots, X_q) = \frac{e^{\beta_0 + \beta_1 X_1 + \cdots + \beta_q X_q}}{1 + e^{\beta_0 + \beta_1 X_1 + \cdots + \beta_q X_q}}$$

$$\frac{1}{K} \sum_{i \in \mathcal{N}_0} I(y_i = j),$$