

Hints on PS2.

Problem 1.5.4. Note there is a symmetry between P and Q . One can assume that X consists of two points, and interchanging the points also interchanges P and Q . I.i.d. sampling from a distribution on two points gives a binomial distribution.

Part (b). Because of the discreteness of the distributions we can't necessarily make the error probabilities equal to 0.05, they may be smaller. Some values of A and B are equivalent to others. One may as well consider just values that can be equal to likelihood ratios r_n for some n .

Part (c). Apply Wald's identity to $Y_j = \log f(X_j)$ where f is the simple likelihood ratio. Also, use the exact solution for the error probabilities in this case as given near the end of the Examples in Section 1.5, p. 3.

Problem 1.6.1. Use again the same methods as in the last hint (part (c)).