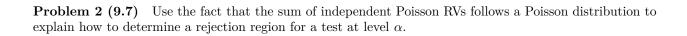
HW 13

For Problems 1-3, let X_1,\ldots,X_n be a random sample from a $\operatorname{Poisson}(\lambda)$ distribution.

Problem 1 (9.7) Find the likelihood ratio for testing $H_0: \lambda = \lambda_0 \text{ vs } H_A: \lambda = \lambda_1 \text{ where } \lambda_1 > \lambda_0.$



Problem 3 (9.8) Show that the test in the previous problems is uniformly most powerful for testing $H_0: \lambda = \lambda_0$ vs $H_A: \lambda > \lambda_0$.