

1. Suppose the following data are iid from a Poisson distribution with mean λ . The mle of λ is
 1. Sum of all X
 2. Sample mean
 3. Sample variance/sample mean
 4. First observation of X
2. Likelihood ratio test is an example of a
 1. UMP test
 2. UMM test
 3. UMU test
 4. Z test
3. Suppose X_1, X_2, \dots, X_n is a iid sample from a normally distributed population with mean μ and variance $=\sigma^2$
The mle of σ^2 is
 1. Unbiased
 2. Biased
 3. 0
 4. Less than the mean

4. The Cramer Rao inequality is a statement about

1. Efficiency of an unbiased estimator
 2. Unbiasedness of an efficient estimator
 3. Estimator consistency
 4. Variance of a biased estimator
5. The mle estimators are
 1. T distributed
 2. Are exactly normally distributed
 3. Are asymptotically normally distributed
 4. Are chi-squared distributed