A. Problems to Submit

1. BE Exercises 10.5, 10.7, 10.16
2. BE Exercises 10.11, 10.12, 10.20, 10.25
3. Let $X_1, \ldots, X_n$ be random sample from the Normal distribution $N(\theta, 1)$.
   (a) Find a complete sufficient statistic for θ.
   (b) Show that $\bar{X}_n^2 - \frac{1}{n}$ is a UMVUE for θ^2.