

Math Lab Challenge 07

Part 1

- a. Variance = 1.495784
- b. `s.var` gives an unbiased estimate of the population variance

Part 2

- a. Upper Limit = 2.198779
Lower Limit = 1.001221
- b. Upper Limit = 2.102511
Lower Limit = 1.097489

Part 3

- a. Upper Limit = 0.1446147
Lower Limit = 0.05538533
- b. ;
 - i. The true p doesn't, but the \hat{p} , the \bar{X} , and the s vary randomly
 - ii. We are overall confident that defects in the manufacturing process are between 4.6% and 14.6%