

Math 10B with Professor Stankova

Quiz 11; Tuesday, 4/16/2019

Section #203; Time: 11 AM

GSI name: Roy Zhao

Name: _____

Circle True or False or leave blank. (1 point for correct answer, -1 for incorrect answer, 0 if left blank)

1. True False The 90% confidence interval will be smaller than the 95% confidence interval.
2. True False The maximum likelihood estimate for p of a geometric distribution is the same one you get by setting $\hat{\mu} = \frac{1-p}{p}$.

Show your work and justify your answers. Please circle or box your final answer.

3. (10 points) (a) (5 points) The number of threes made during an NBA game is Poisson distributed. Last Saturday, the number of threes made were 14, 26, 25, and 13. What is the 95% confidence interval for the number of 3's made during a game?

- (b) (5 points) Using the numbers from the previous part, calculate the maximum likelihood estimate for the parameter λ .