Math 10B with Professor Stankova

Quiz 11; Tuesday, 4/16/2019 Section #206; Time: 9:30 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 99% confidence interval will be smaller than the 95% confidence interval.
- 2. True False To make our 95% confidence interval twice as small, we need twice the sample size.

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 Sunday, the number of threes made were 16, 15, 23, and 22. 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 .