MATH10282: INTRODUCTION TO STATISTICS
SEMESTER 2
QUIZ PROBLEM 7
(Deadline: Thursday 15 April 2021, 10:00am)

Suppose X_i distributed as Exp $(i\lambda)$, $i = 1, \ldots, n$ are independent random variables. The maximum likelihood estimator of λ is

a) $\dfrac{\sum_{i=1}^{n} i x_i}{n}$.

b) $\dfrac{\sum_{i=1}^{n} x_i}{n}$.

c) $\dfrac{n}{\sum_{i=1}^{n} i x_i}$.

d) $\dfrac{n}{\sum_{i=1}^{n} x_i}$.

This problem is worth 1 mark. Marking scheme: 1 mark if the answer is correct, 0 mark if the answer is incorrect.

Please use Blackboard to enter your answer.