MATH10282: INTRODUCTION TO STATISTICS

SEMESTER 2

QUIZ PROBLEM 8

(Deadline: Friday 29 April 2022, 11:00am)

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

a) $\dfrac{6}{n(n+1)(2n+1)} \sum_{i=1}^{n} (ix_i)$.

b) $\dfrac{6}{(n+1)(2n+1)} \sum_{i=1}^{n} (ix_i)$.

c) $\dfrac{6}{n(2n+1)} \sum_{i=1}^{n} (ix_i)$.

d) $\dfrac{6}{n(n+1)} \sum_{i=1}^{n} (ix_i)$.

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.