

Math 201, Spring 2022

Problem Set # 12

Due April 26, 2022 at 11:59pm on gradescope

Question 1. Let $X \sim \text{Binomial}(n, p)$.

- (a) Compute the moment generating function $M_X(t)$ of X .
- (b) Compute $E[X^2]$ using the moment generating function from (a).

Question 2. Let X be uniformly distributed on $[0, 1]$. Find the moment generating function for X .