

Math 4600 Homework: Continuous Distributions (Practical 3)

This homework assignment is a group assignment done in Mathematica. You'll submit a single PDF for your group through Gradescope for this assignment. One person actually does the upload, adding group members. Here's a video on the details.

1. (30 points) Suppose that we repeat an experiment which has a finite probability of success on each try, and we define X to be the random variable given by the number of trials between each success. We will gather some data about X , and derive an explicit PDF and CDF for a continuous approximation to X .

Follow the instructions in the third of the "Three Interesting Problems" Mathematica notebooks from the course webpage (here is a direct link).

You should do your work directly in that notebook by adding cells as needed. You'll then export your edited notebook as a PDF file and upload it to Gradescope for this assignment. Gradescope will ask you to select the pages of your submission which contain work for question #1. Just select all the pages in your PDF.