



MA-UA 2224: Data Analysis Quiz 1.v1 Fall 2021

(Printed Last Name) (Printed First Name) (N number) (NetID) (Section)

You have 25 minutes.

Please show all work and give exact answers.

1. (4 points) How many distinct permutations can be made from the letters of the word INFINITY?

2. (7 points) In a poker hand consisting of 5 cards, find the probability of holding 3 face cards and 2 aces. (Hint: The face cards are the jacks, queens and kings.)

3. (9 points) According to Sam Parker's opinion, there are three types of drivers in NYC: Good, Bad, and Egregious.

12% of all drivers are Good

68% of all drivers are Bad

The rest are Egregious.

Good drivers drive in the passing lane 25% of time (only when actively passing).

Bad drivers drive in the passing lane 80% of the time.

Egregious drivers camp in the passing lane 100% of the time.

You observe a driver in the passing lane. Determine the probability that the driver is Bad OR Egregious.