

Math 153 - Quiz 7

April 7, 2016

Name _____

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (5 points) A recent Gallup poll indicates that 63% of college students are in favor of their college banning the wearing of costumes that stereotype certain racial or ethnic groups. 125 college students are selected at random.

- (a) What is the probability that exactly 80 students are in favor of a ban?
- (b) What is the probability that fewer than 70 are in favor of a ban?
- (c) How many students in the sample should be expected to support a ban?
- (d) What would be an unusually small number of students who are in favor of a ban?

2. (5 points) A certain Twitter user receives 8 tweets per hour, on average.

- (a) What is the probability that the user receives exactly 6 tweets in any given hour?
- (b) What is the probability that the user receives at least 9 tweets in any given hour?
- (c) What would be an unusually small number of tweets received in any given hour?
- (d) What is the probability that the user receives exactly 200 tweets in any given day?