Math 5710 Tuesday, 7/21/20 Quiz 21

1. What is your name?

Brock Francom

2. For each of the following propositions, determine whether it is true or not; indicate your determination in the usual way and then write a paragraph justifying your choice:

A. $X \in \{$ Bernoulli random variables $\} \rightarrow X \in \{$ binomial random variables $\}$

(T) F

A Bernoli random variable is a binomial random variable. A Binomial random variable with $n=1$ is a Bernolli random variable, but since a binomial random variable can have more than 1 trial. ∴

B. $X \in \{$ binomial random variables $\} \rightarrow X \in \{$ Bernoulli random variables $\}$

T (F)

This is false because a binomial random variable can have many trials, while Bernoulli can only have 0 or 1 trials. That means a Binomial random variable can be a Bernoulli random variable but it also can not be one.

3. Smile.