Math 5710   Wednesday, 7/29/20   Quiz 26

1.   What is your name?

2.   Write a paragraph the explains why the sampling method employed by Ferguson (see Item #4C from Meeting #26's agenda) is not random whereas the sampling method employed by T.J. (see Item #4D from Meeting #26's agenda) is random.

Sample explanation:

Ferguson arbitrarily selected Title #12 and then every 12th one after that was a winner. Clearly the probability of any one of the first 11 titles being selected is 0. In a random sample, before the first title is selected each title has the same probability of being selected as any other. In this study that probability should be 1/144 as it was in the study T.J. conducted. With T.J.'s experiment, it wasn't until after she randomly selected the first title that all of the other titles were selected. In T.J.'s study each book in the population was as equally likely to be selected as any other. The first title was selected randomly and each of the other 11 were also since they were dependent on a random outcome. Yes, once "8" was randomly selected the fate of the other titles was determined but that determination was based on a random event.

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4.   Smile.