CALIBRATION DOCUMENT
BN 2.6 What’s Simple about an SRS?

Exhibit 1 - Question
1. List two uses of the word “random” from the audio that are different from the technical definition given above. How do you use the term “random” in your own life?

*Used a lot to mean “peculiar, strange, odd, or incoherent.” Started as a noun in the 14th century.*

- We went to the most random party
- She met some random guys (from Clueless)

*I seldom if ever use the word random. I do hear a lot of people use it and it is typically used just like the examples above.*

Exhibit 2 - Questions
1. List all possible distinct samples of size two from this four-person population. Make sure that your notation makes it possible to distinguish all four members of the population.

*MR= Male Republican
MD= Male Democrat
FR = Female Republican
FD = Female Democrat*

*Samples: (MR, MD), (MR, FR), (MR, FD), (MD, FR), (MD, FD), (FR, FD)*

2. For a simple random sample of size 2, all samples of size 2 have the same chance of being chosen. What would the likelihood be of choosing any one of these samples?

*In this case there are six samples of size two. If they are all going to have the same chance of being chosen then that chance has to be 1 in 6 or 1/6.*
3. Suppose for a sample of size two to be “representative” of the population, it has to have exactly one man and one woman, and one Democrat and one Republican. What is the chance of selecting a simple random sample of size two from this population that is representative (in this sense of the word?)

Only these two will work. So the chances are 2 in 6 of getting a representative sample in the sense of this prompt. So there are 4 chances in 6 that the result of an SRS in this case won’t be representative in that sense.

(MR, MD), (MR, FR), (MR, FD), (MD, FR), (MD, FD), (FR, FD)

Exhibit 3 – Questions
1. What is your population?

The way the prompt is stated the population would be the 113 friends on Facebook

2. Describe in detail how you would select your simple random sample.

I guess I could take all 113 names and put them in a container, mix them up and then draw 20 names out. Or I could use Excel or a tool on the web to help me do the same thing.