1. On a television show I saw recently on C-SPAN, 64 participants provided their opinions about the current Iran situation (they did so by calling in to the show). Which type of **sampling design** describes this sample?
(a) voluntary response sample
(b) stratified sample
(c) random sample
(d) convenience sample

2. Starting at Line 122 in Table A (**Table of Random Digits**), I read off the following digits:

```
13873 81598 95052 90908
```

Our population consists of 250 subjects, labeled 001, 002, 003, 004, and so on, up through the **last subject labeled 250**. We would like to choose an simple random sample of size $n = 3$. Reading the random numbers from **left to right**, which subjects would be chosen?
(a) 138, 738, 159
(b) 138, 815, 950
(c) 138, 159, 052
(d) 138, 052, 909

3. What did the **Literary Digest example** (FDR/Landon presidential election in 1936) teach us?
(a) Faulty sampling frames will likely cause bias.
(b) Republicans from Kansas have no right running for president.
(c) Experiments can provide evidence of cause and effect.
(d) We can always predict results with certainty.

4. What is the difference between an **experiment** and an **observational study**?

5. In a medical study, researchers would like to compare 2 drugs (A and B) for patients with advanced lung cancer. There were 600 patients used in the study (they were recruited from clinics all over the US). The patients were randomly assigned to receive one of the drugs.

(a) What is the **population** of interest here?

(b) What is the **sample**?