**Main Ideas/Questions**
Biased Sampling
Review

**Notes**

*Read each scenario and determine if the results would be bias.*

**Population:** STAT 1010

**Sample:** All students in the last 3 rows

**Response:** GPA

Convenience sampling

*both biased*

**Population:** All users of a hotel

**Sample:** Users who took the time to post a review

**Response:** Hotel quality

Voluntary response

**Types of Sampling**

How do we reduce bias in our data?

Random **SAMPLING!!**

**Simple Random Sample (SRS)** - Consists of individuals from a population chosen in such a way that every individual has an **equal** chance to be selected. You can use a Random Number Table or a calculator to generate random numbers to select from a population.

**Systematic Random Sample** - Consists of individuals from a population chosen by starting at a **random** point and using a **fixed** periodic interval (i.e., every 5 people)
Types of Sampling

Main Ideas / Questions

Types of Sampling (Cont.)

Notes

Stratified Random Sample – Consists of individuals from a population that is based on the members’ common attributes or characteristics (i.e. boys & girls)

1. We use random lines using the Table B. If they don’t give you a line to use, you can use ANY line.

2. Label your population – assign a number to represent each individual.

EXAMPLE:

5 individuals – use single digits, only use numbers 0-5

25 individuals – use double digits, only use numbers 00-25

138 individuals – use triple digits, only use numbers 000-138

3. You must SKIP numbers that don’t represent an individual and numbers that have already been used.

Example:

There has been much talk about teenagers’ use of social media. Teens are exposed more and more to inappropriate content. Should stricter controls be imposed on social media apps that teens use? If each state nominates 1 teen to represent them.

Use the following lines:

SRS of size 8

38573 01324 37930 43524
38361 57123 63528 78544

Systematic of size 3

17 - Kentucky
Massachusetts
Missouri

Stratified of size 4 – East/West of the Mississippi (line 101 in book)

East

[Diagram of map showing states]

West

19 - Maine 50 - Wyoming
22 - Michigan 34 - North Dakota