

**Complete the following on PG. 209 #5.7, 5.9 – 5.12.**

5.7) You are researching apartments in your area and decide to choose 5 apartment complexes at random to visit for a tour. Use Table B and line 117 to select a simple random sample of 5 complexes.

Ashley Oaks	Country View	Mayfair Village
Bay Pointe	Country Villa	Nobb Hill
Beau Jardin	Crestview	Pemberly Courts
Bluffs	Del-Lynn	Peppermill
Brandon Place	Fairington	Pheasant Run
Briarwood	Fairway Knolls	Richfield
Brownstone	Fowler	Sagamore Ridge
Burberry	Franklin Park	Salem Courthouse
Cambridge	Georgetown	Village Manor
Chauncey Village	Greenacres	Waterford Court
Country Squire	Lahr House	Williamsburg

5.9) You want to choose an SRS of 25 voting precincts in a city. There is a total of 440 voting precincts in this city.

a) Explain clearly how to label the 440 precincts. How many digits will each make up each label?

b) Use Table B and line 107 to choose the first 10 precincts of the sample.

5.10) A university has 1000 male and 500 female faculty members. A survey selects a sample of 100 men and separately selects a sample of 50 women at random. The 150 faculty members make up the sample. Explain why this method is not an SRS. What type of sample is this?

5.11) Use Table B and line 173 to select an SRS of 5 of the following members of an academic team for a drug test.

Agarwal	Fuest	Milhalko	Shen
Andrews	Fuhrmann	Moser	Smith
Baer	Garcia	Musselman	Sundheim
Berger	Healy	Pavnica	Wilson
Brockman	Hixson	Petrucelli	
Chen	Lee	Reda	
Frank	Lynch	Roberts	

5.12) Sometimes its not practical to take an SRS. Here is an example of why. 1000 iPhones are produced in a factory. Management would like to make sure that the phones' display screens meet quality control standards. It takes 10 minutes to inspect one phone. Management would like to take a sample of 25 phones from the day's production.

a) Explain why it would be difficult for managers to complete an SRS of 25 iPhones. (Hint: all phones must be produced before you can start an SRS)

b) One employee suggests that is would be easy to inspect the last 20 iPhones that were produced that day. Why is this not a good idea? What type of sample is this?

c) Another employee suggests that they inspect every 50<sup>th</sup> iPhone that is produced. Why is this method not an SRS?