Section 1.4 IRA Guide

Introduction

Screen 1: List of Objectives

Objective 1: Obtain a Stratified Sample

Screen 1: Definition of a stratified sample. Watch the In Other Words video for further explanation.

Screen 2: Example 1 illustrates how to obtain a stratified sample.

Screen 3: In this problem you will determine which one of the listed samples are possible as a stratified sample.

Objective 2: Obtain a Systematic Sample

Screen 1: Definition of a systematic sample.

Screen 2: Example 2 shows how to obtain a systematic sample without a frame. Of particular importance is the method for determining the number of the last individual to be selected, near the end of the video.

Screen 3: This video discusses how to choose a value of k when the population size is unknown.

Screen 4: This video explains how to determine k when the population size N is known. The formula will be helpful when you do the homework.

Screen 5: This screen lists the 5 steps in systematic sampling. There is a formula for determining k, as well as a formula for the number of the last individual in the sample [$p + (n - 1) k$].

Example 6: This problem walks through the steps of systematic sampling. To find k, divide N by n and round down. Start with the value of p that they provide, then add k to find the next two individuals. Use the formula listed from screen 5 to find the last individual.

Objective 3: Obtain a Cluster Sample

Screen 1: Definition of a cluster sample. Watch the In Other Words video for further explanation.

Screen 2: Example 3 walks you through the process of obtaining a cluster sample.

Screen 3: This screen goes over the issues to consider in cluster sampling. Give it a quick read.

Screen 4: You are asked to determine which of the potential groups represent an actual cluster. **Be careful with this problem – you only get one chance.**

Screen 5: This screen explains convenience sampling. Be sure to watch the caution video.

Screen 6: Some examples of convenience sampling – give it a quick read.

Screen 7: Explanation of multistage sampling – again, just give it a quick read.

Screen 8: An example of multistage sampling.

Screen 9: This is a quick discussion of sample size. We will cover this in detail in Chapter 9. For now, just give it a quick read.

Screen 10: Watch the animation for a summary of all of the sampling techniques.

Screen 11: End of Section