

Section 1.3 IRA Guide

Introduction

Screen 1: List of Objective

Screen 2: Definition of random sampling. Make note of the last sentence that talks about the results from a convenience sample.

Screen 3: Give a quick read to this explanation of the limitations of convenience samples.

Screen 4: A listing of the four types of effective sampling techniques – simple random sampling, stratified sampling, systematic sampling, and cluster sampling. Only simple random sampling is discussed in this section – the rest are left to section 1.4.

Objective 1: Obtain a Simple Random Sample

Screen 1: Definition of simple random sampling and a simple random sample. Note that N will always be used to represent the size of a population and n will always be used to represent the size of a sample. Watch the In Other Words video for further explanation.

Screen 2: Example 1 illustrates simple random sampling.

Screen 3: In this problem, start by listing all the possible samples of size 3 from the list of classes. Click on the magnifying glass icon under Part b to see the complete list of all the classes. Once you have listed all of the possible samples of size 3 then go back and check the boxes corresponding to each of those samples.

Screen 4: This screen starts to discuss how to select the individuals in a simple random sample. Make note of the definition of a **frame** – this will be important in later types of sampling. Watch the In Other Words video.

Screen 5: Animation 1 discusses the process of simple random sampling. If you want to really understand this type of sampling you must watch this video.

Screen 6: Example 2 – Watch the StatCrunch video (labeled “SC”) to see how to draw a random sample using StatCrunch, which is the statistical software we use in this course. You could also watch the By Hand video (icon of a hand holding a pen) to see how this is done by hand.

Screen 7: This problem covers how to interpret the results of technology when selecting a random sample. Keep in mind – you cannot select the same individual more than once.

Screen 8: End of Section