

## **Section 11.1 IRA Guide**

### ***Introduction***

Screen 1: I have deleted the problem about “Completely Randomized Design”, so you should see a blank screen.

Screen 2: This exercise will test your understanding of a matched-pairs design (Section 1.6).

Screen 3: This exercise tests your ability to perform a one-proportion test (Section 10.2).

Screen 4: This problem involves the creation of a confidence interval for a proportion (Section 9.1). Use StatCrunch, not the By Hand approach in Help Me Solve This/Show An Example.

Screen 5: A review of the difference between statistical significance and practical significance. (Section 10.3)

Screen 6: List of Objectives

### ***Objective 1 – Independent versus Dependent Sampling***

Screen 1: Watch the video on the difference between independent and dependent sampling.

Screen 2: Example 1 covers identifying independent and dependent samples. Watch the “By Hand” video solution.

Screen 3: This exercise is based on Example 1 on the previous screen.

### ***Objective 2 – Two Proportion Test***

Screen 1: This gives the background for the sampling distribution for this hypothesis test. You can give this a quick scan, but StatCrunch takes care of all of this for us behind the scenes.

Screen 2: Conditions for the two proportion test, and the steps involved. Be sure to watch the video that is linked at the top of the screen.

Screen 3: Example 2 shows how to perform a 2 proportion test. Be sure to watch the StatCrunch video solution.

Screen 4: More about “practical significance”. Watch the “Caution” video.

Screen 5: This exercise is based on Example 2 on Screen 3.

### ***Objective 3 – Confidence Intervals for Two Proportions***

Screen 1: Explanation about constructing a confidence interval for the difference between two population proportions.

Screen 2: Example 3 covers how to make a confidence interval for the difference between two proportions. Be sure to watch the StatCrunch solution video.

Screen 3: This exercise is based on Example 3 on the previous screen.

**Objective 4 – Sample Size for Estimating Two Proportions**

*You are not responsible for the material covered in this objective.*

Screen 1: Background information for finding the sample size to estimate the difference between two proportions.

*You can skip this screen.*

Screen 2: Formulas for sample size – StatCrunch will do this for us.

*You can skip this screen.*

Screen 3: Example 4 covers finding the right sample size. Be sure to watch the StatCrunch solution video.

*Although you can watch the example if you'd like, you are not responsible for this material.*

Screen 4: This exercise is based on Example 4 on the previous page.

*I have removed this problem from the assignment, so you should just see a blank screen.*

Screen 5: End of Section