

## Section 3.5 IRA Guide

### **Introduction**

Screen 1: List of Objectives

Screen 2: Watch the video, which summarizes material that has been covered so far.

### **Objective 1: Determine the Five-Number Summary**

Screen 1: Definition of **Five-Number Summary**. Be sure that you know which measures are included in the five-number summary because you will be simply asked to find the five-number summary, not to find the minimum, Q1, median, Q3, and maximum.

Screen 2: Example 1 shows how to obtain the five-number summary. Watch the StatCrunch video solution.

Screen 3: This problem is based on Example 1. Use StatCrunch to find the five values.

### **Objective 2: Draw and Interpret Boxplots**

Screen 1: Click through the five steps for drawing a boxplot. Note: You can choose not to make temporary marks at the fences in step 3 as long as you check to determine whether any of the data are outliers and need to be represented with an asterisk.

Screen 2: Example 2 shows how to construct a boxplot. Watch the StatCrunch video solution to see how to construct a boxplot using StatCrunch, including how to draw the boxplot horizontally and how to show the outliers.

Screen 3: This problem is based on Example 2 on the previous screen. You have to determine which boxplot is closest to the one you created. Pay attention to the sides of the boxes, the location of the median, whether there are any outliers, etc. By the way, since there are only 3 answers to this multiple choice question, you only get one chance.

Screen 4: This screen shows the relationship between the shape of a distribution and the shape of a boxplot. This tells us that the shape of the distribution can be determined from a boxplot.

Screen 5: Read through this discussion about how exactly to determine skewness from a boxplot.

Screen 6: This problem is based on the material on the previous two screens.

***You will only get one attempt at this problem, so be sure that you understand the concepts before you submit your answer to the problem.***

Screen 7: This problem is based on the material on screens 4 and 5.

***You will only get one attempt at this problem, so be sure that you understand the concepts before you submit your answer to the problem.***

Screen 8: This problem is based on the material on screens 4 and 5.

***You will only get one attempt at this problem, so be sure that you understand the concepts before you submit your answer to the problem.***

Screen 9: Example 3 shows how to compare two distributions using boxplots. Watch the StatCrunch video solution to learn how to do this using StatCrunch. (You can open the data in StatCrunch by clicking on the icon.)

Screen 10: This problem is based on the material on screens 4 and 5. Use StatCrunch to create a boxplot, and then determine the shape of the distribution from the boxplot.

Screen 11: End of Section