

Unit 2 Summary Lab Assignment

Name: _____

Learning Goal: For the distribution of a quantitative variable, describe the overall pattern (shape, center, and spread) and striking deviations from the pattern.

Specific Learning Objective:

- Use technology to generate graphs and numerical summaries to compare distributions of a quantitative variable.
 - Compare and contrast different ways of identifying intervals of “typical” data values.
- 1) Suppose that you are designing a one-size-fits-most unisex belt for adults. A one-size-fits-most belt cannot fit everyone, but we want it to fit “typical” adults. We will use technology to identify “typical” intervals of waist measurements for the 507 adults in the data set *Body Measurement.txt* using ideas from Unit 2.
- a) For the waist girth, find an interval of typical measurements using quartiles.
- b) Find an interval of typical measurements using mean and standard deviation.
- c) Which interval do you think is the best to use in this situation to identify typical measurements? Why?

2) Open the *Body Temp and Heart Rate* data set.

a) What heart rate do you think best represents the men in this sample? What about the women? Did you choose a mean or a median or some other number? Why?

b) Which gender has more variability in their heart rates? Support your answer.

c) Give an interval of “normal” heart rates for each gender using either quartiles or mean and SD. Briefly explain why you chose the measures you used.

d) Based on this data, what do you think nurses should use as an interval of typical heart rates for adults? Should they use different intervals for men and women? Why or why not?