

## AP Stats – Chap 3

### Displaying and Describing Quantitative Data

always...**Think – Show – Tell**

most common displays of quantitative data:

- histogram
- stem-and-leaf plot
- dotplot
- timeplot (timeline)

**NO** description about a display is complete without talking about **all three aspects!**

- shape
- center
- spread

many of the concepts in this chapter are  
**intentionally vague:**

- uniform
- unimodal
- bimodal
- symmetric
- skewed
- cluster
- gap
- outlier (yes...even this is, sometimes)

# AP Stats

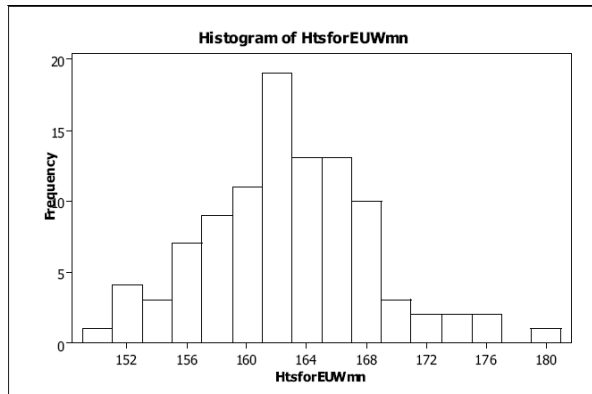
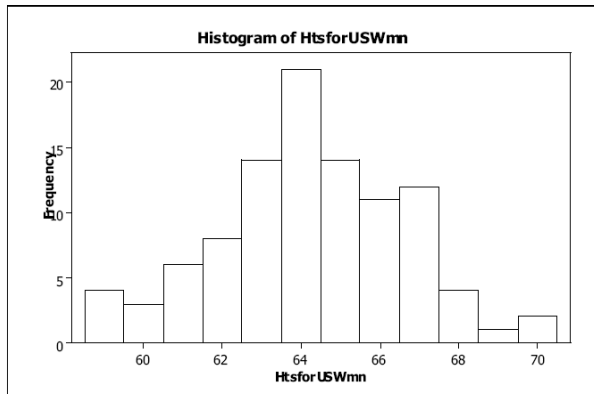
## Chap 3 Handout

Name \_\_\_\_\_ Pd \_\_\_\_\_

**Show all necessary work and place your answers on the spaces provided.**

### Women's Heights.

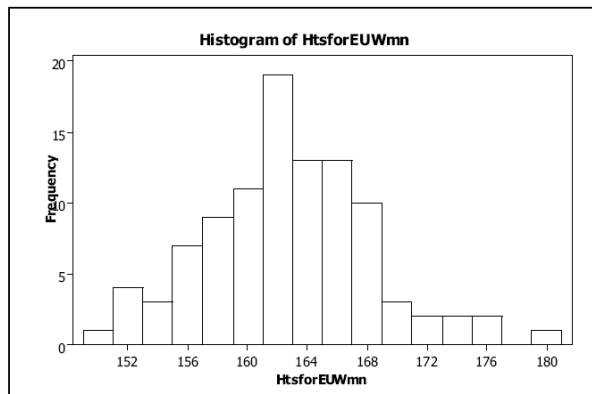
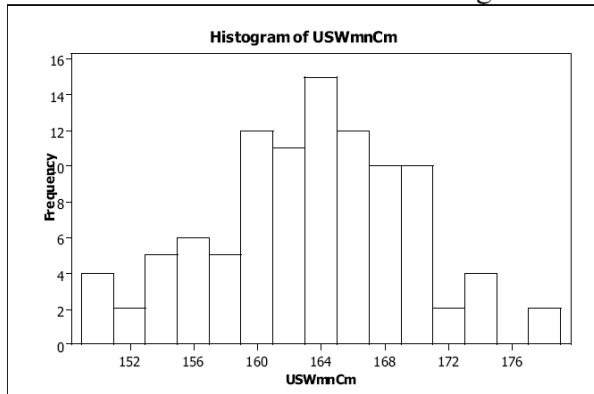
The following are histograms for the heights of 100 US women and the heights of 100 European women:



Note that the scales for the women's heights are very different, and thus it makes it hard to make a comparison between the heights of these women in the US and in Europe.

1. What might the cause of this difference in scale be?

Now the scales for the women's heights are the same...

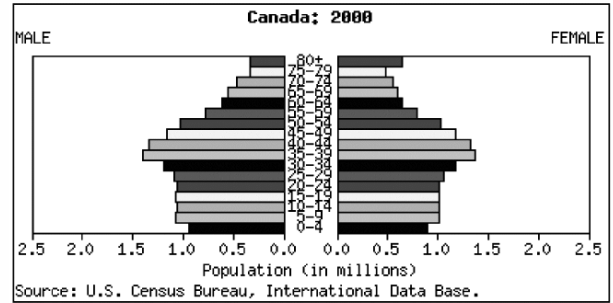


2. Compare the two distributions of the women's heights. Be sure to talk about shape, center, and spread.
3. While the scales for heights the same in the second set of histograms are, there is still something that could be improved so that we could compare these two distributions better. Identify this improvement and explain why it would be better.

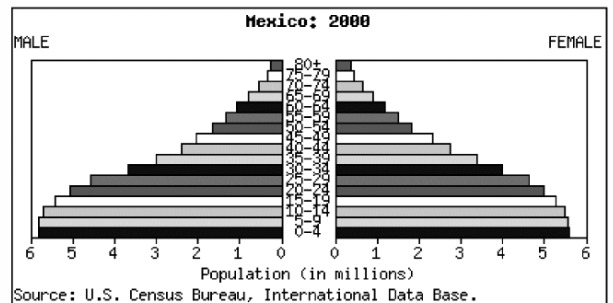
### ***Male and Female Populations.***

At [www.census.gov](http://www.census.gov) you can create a “population pyramid” for any country. The pyramids are back-to-back histograms showing the number of males and females in 5-year age brackets.

1. Here’s one for Canada for the year 2000.  
Describe the age distribution of Canadian females.



2. Here’s the same information for Mexico.  
Compare the age distributions for males in Canada and Mexico.



3. What aspect of the graphs for Canada and Mexico makes the comparison difficult?
4. This pyramid shows Mexico’s 2000 female population and the census bureau’s projection for 2050. Write a few sentences summarizing the changes that are forecast.

