

Lab 3 (Chapter 4)
GEOG 171/172
Spring, 2008
Due: Wednesday, March 5

THEMATIC MAPS AND DATA CLASSIFICATION

1. (5 points each) Do questions 1-2, 4-8, and 10 in the book on p. 172. When it says to “capture” a map, this means export it to PDF without worrying about the legend, title, etc.. If it says to “capture” a map and a legend, export a *complete* and finished map to PDF or JPG. If it just says to “capture” a legend, don’t worry about it. Name your exported files in the style of “question1.pdf” (or. jpg).
2. (30 points) Do the challenge problem on p. 173. Do not print the map, but rather export it and name it “challenge_problem.pdf” or “challenge_problem.jpg”.
3. (50 points) With the data set below, perform the following tasks
 - a. Make four identical histograms using bins of width 5 (bin widths are the groups that appear at the bottom of the histogram)
 - b. On each histogram, perform the following classifications with four classes
 - i. equal interval
 - ii. defined interval (you choose the interval)
 - iii. quantile
 - iv. natural breaks
 - c. Which of the above do you think best represents the data? Why? Please be as detailed as possible.
 - d. For +3 points extra credit, guess what the numerical attribute is.

Turn in your digital work via e-mail in the normal fashion. Question 3 should be done on paper (either manually or in Excel) and turned in at the beginning of class next Wednesday.

| STATE | MYSTERIOUS_ATTR |
|--------------|-----------------|
| Washington | 11 |
| Montana | 3 |
| North Dakota | 3 |
| South Dakota | 3 |
| Wyoming | 3 |
| Idaho | 4 |
| Oregon | 7 |
| Nebraska | 5 |
| Nevada | 5 |
| Utah | 5 |
| California | 55 |
| Colorado | 9 |
| Kansas | 6 |
| Arizona | 10 |
| Oklahoma | 7 |
| Texas | 34 |
| New Mexico | 5 |