Final Exam, Part 1 (take home) Name _____

BUSAD 265 Circle One: Sec 1 11:30-12:50 or Sec 2 1:00-2:20

Fall 2014

Show All Work…and make it easy to understand!

Research Problem: Was the 2014 Pueblo County Turnout Rate significantly different than the mean turnout rate for all 3,000+ Counties in the US?

Download Voter Turnout Data

- Go to this URL: http://www.electproject.org/2014g
- Just above the Turnout Rates table, there is a link to a spreadsheet download.
- Delete the "District of Columbia" row and the "United States" summary row
- Delete 1 additional row as specified below.
- Your ***Assigned State*** (to delete and for #3) _____.
- n = 49

Use the "**VEP Highest Office**" Column to complete the following:

1. Produce a complete set of descriptive statistics for your set of State turnout rates.
2. Illustrate the frequency distribution of your State turnout rates.
3. Calculate a Percentile Rank and a Z-Score for your ***Assigned State's*** turnout rate.
4. Assume County turnout rates are normally distributed and State turnout rates may be used as a representative sample data set. If a County is randomly selected...
    a. What is the probability of a turnout rate between 35% and 45%?
    b. What is the probability of a turnout rate less than 30%?
    c. What is the probability of a turnout rate greater than 50%?
5. Produce a point estimate and calculate a 95% confidence interval to estimate the turnout rate of a randomly selected US County.
6. What was the approximate 2014 voter turnout rate in Pueblo County?
7. Conduct a Hypothesis Test to determine if the turnout rate in Pueblo County is significantly different (alpha = 0.05) from the turnout rate for the entire US.
8. What is the probability of randomly selecting a US County with a voter turnout rate lower than the turnout rate in Pueblo County?