Statistics Practice Test   Name: _____

Consider the following data: 34, 36, 29, 36, 12, 20, 17, 41, 36, 26, 59, 18, 17, 22, 29, 17, 36, 22, 16, 68, 49, 39, 15, 15, 20, 9, 18, 25, 36, 12

1. What is the mean?   1. _____

2. What is the median?   2. _____

3. What is the mode?   3. _____

4. What is the standard deviation of the above data?   4. _____

5. What is the range of the data at 2 standard deviations?   5. _____

6. Construct a stem-and-leaf plot from the data

           6. _____

7. Create a frequency table from the above data

           7. _____

8. By viewing the histogram, is the graph of the above
data even, normal, skewed left, or skewed right?   8. _____

Vocabulary:

9. What does σ represent?   9. _____

10. What does x-bar represent?   10. _____

11. What does it mean to be *skewed*?   11. _____

12. Explain the difference between a population and a sample.

_____

Normal Curve: Standard normal distribution

13. What percent of data is contained within the first 3 standard
deviations?   12. _____

14. What percent of data falls between –2 and +3 standard deviations?   13. _____

15. What percent of data is contained within the 2nd standard deviation? 14. _____

16. What percent of data falls between the mean and +3 standard
deviations?   15. _____

17.   The average SAT scores for a particular university's students is 2060 with a standard deviation of 65.3. Assuming your score includes only *whole* points, and that the university only accepts students who fall within one standard deviation of the mean, what is the minimum SAT score an applicant must have to be accepted?

                                                            16. _____

Measures of Central Tendency:

18. When should the mode be used as a measure of central tendency?

_____

19. When should the median be used as a measure of central tendency?

_____

Sampling:

20. 65% of the voters of a particular county are registered democrats. In a poll of 1,000 citizens, half of which were democrats, 350 voted "yes" and 50 non-democrats voted "yes." Estimate the percent of the whole voting population who would vote "yes."

20. _____