Sec I – Term 4, Statistics Name_____ ID: 1

Assignment: T4-69 Mean, Std Deviation Date_____ Period_____

Use the following data sets and your calculator to complete the following:
Ages of people at a party:

13, 14, 14, 13, 15, 15, 15, 16, 14, 27, 16, 19, 17, 15, 17, 15, 15, 14, 18

1. What is the mean of the data set?

2. What is the standard deviation of the data set?

3. Are there any outliers in the data set?

4. What effect does the outlier have on the mean?

5. What effect does the outlier have on the standard deviation?

Ages of students in a college class:

18, 21, 24, 22, 19, 23, 18, 19, 20, 17, 23, 19, 18, 21, 22, 19, 19, 20, 21

6. What is the mean of the data set?

7. What is the standard deviation of the data set?

8. How does the mean compare to the mean of the data set in #1? What does this tell you about the two data sets?

9. How does the standard deviation compare to the standard deviation in #2? What does this tell you about the two data sets?

The number of stories in the tall buildings that Ashley has visited:

88, 88, 110, 88, 80, 69, 102, 78, 70, 55, 12, 79, 85, 80, 100, 60, 90, 77, 55, 75

10. What is the mean of the data set?

11. What is the standard deviation of the data set?

12. Are there any outliers in the data set?

13. What effect does the outlier have on the mean?

14. What effect does the outlier have on the standard deviation?

The following are the scores of the A1 class on the last quiz #17 (not including people who have not taken it):

25, 49, 55, 36, 38, 11, 53, 58, 45, 46, 50, 55, 64, 61, 61, 64, 64, 52, 60, 60,

15. What is the mean of the data set?

16. What is the standard deviation of the data set?

17. Are there any outliers in the data set?

18. What effect does the outlier, if any, have on the mean?

19. What effect does the outlier have on the standard deviation?

The following are the scores of the A2 class on the last quiz #17 (not including people who have not taken it):

47, 58, 21, 64, 49, 58, 45, 56, 62, 55, 55, 36, 5 2, 60, 64, 37, 52, 51, 59, 58, 60, 33, 54

20. What is the mean of the data set?

21. What is the standard deviation of the data set?

22. Are there any outliers in the data set?

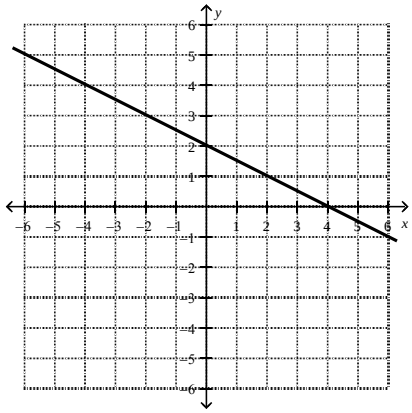
23. What effect does the outlier, if any, have on the mean?

24. What effect does the outlier have on the standard deviation?

25. Which class did better overall? Why

Review:

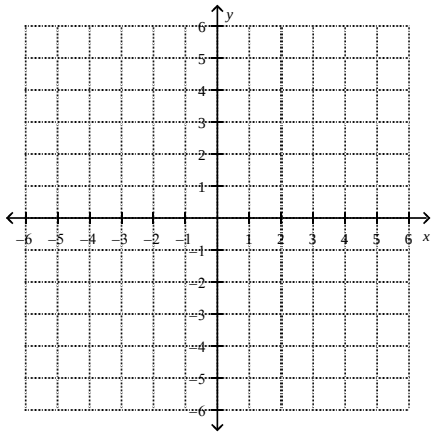
At the right is the graph of $y = -\frac{1}{2}x + 2$.



26. Draw the graph and write the equation for a line parallel to $y = -\frac{1}{2}x + 2$ with a y-intercept of 5.

27. Draw the graph and write the equation for a line Perpendicular to $y = -\frac{1}{2}x + 2$ that goes through the point (0 -3).

28. At the right draw the graph of the equation $y = -x + 3$.



29. Draw the graph and write the equation for a line parallel to $y = -x + 3$ with a y-intercept of –3.

30. Draw the graph and write the equation for a line Perpendicular to $y = -x + 3$ that goes through the point (0,3).