Name_____ Hour _____

Chapter 6 Modeling Data Practice Test

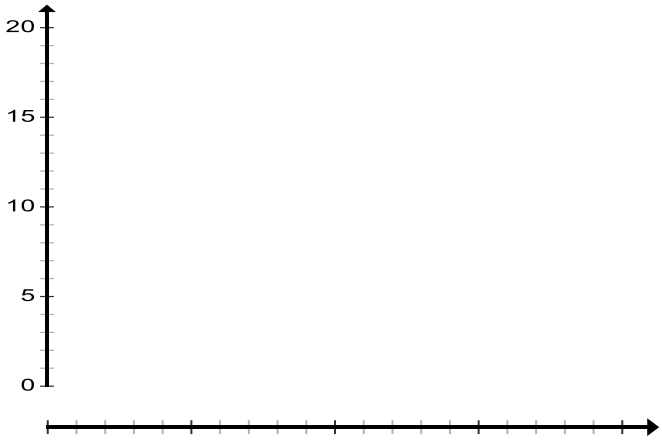
For questions 1-4 use the following information. Customers at the local food court:

141, 128, 132, 141, 152, 169, 121, 133, 131, 156, 142, 136, 135, 144, 135, 153.

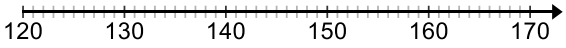
1. Use the data to make a frequency table. Use intervals of 10.

2. Draw a Histogram for the given information with an interval of 10.

Describe the shape of the data_____



3. Draw a Box-and-Whisker Plot for the given information.



4. Using the given information, determine the following:

Mean:_____

Standard Deviation:_____

Median:_____

Mode:_____

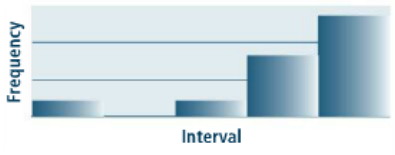
Range:_____

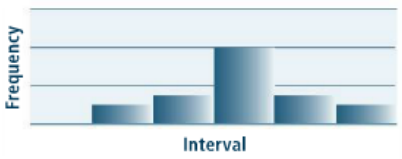
Interquartile Range:_____

Which measure of central tendency is the best?

Why?_____

5. Describe the shape of the distribution. 5a._____

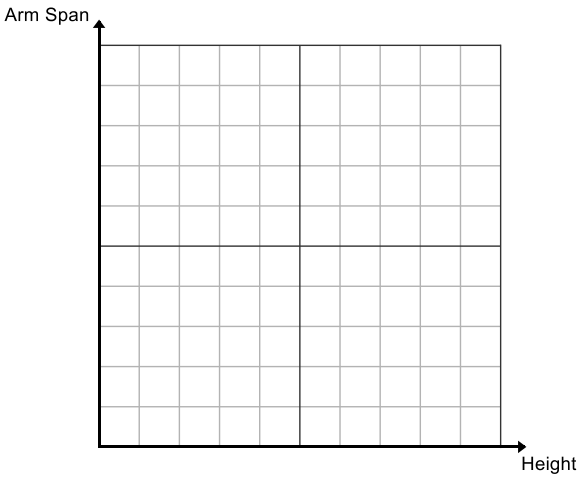
a) 

b) 

5b._____

Use the data below for questions 6-9.

Heights and Arm Spans						
Height (m)	1.5	1.8	1.7	2.0	1.7	2.1
Arm Span (m)	1.4	1.7	1.7	1.9	1.6	2.0



6. Make a scatter plot of the data above. Draw a line of best fit. Determine 6._____

if the relationship has Positive, Negative or no correlation.

7. Write the linear function for the line of best fit. 7._____

8. What is the correlation coefficient (r) for your linear regression? 8._____

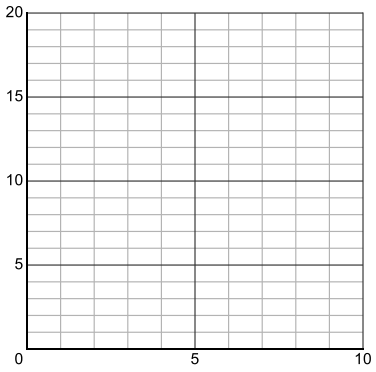
What does this mean? _____

9. Predict the arm span of someone who is 2.2m tall. 9._____

10. For the given information below, is a linear regression or exponential regression best? Why? (6 pts.) 10._____

_____

X	Y
1	4.1
2	5.4
3	7.3
4	9.93
5	13.51
6	17.9
7	24.6



11. Write the equation that best fits the information above. 11._____

State the correlation coefficient (r). (6 pts.) _____

12. If x=10, predict y using your equation. 12. _____

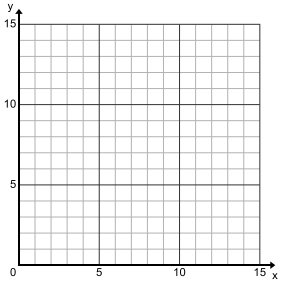
13. For the given information below, is a linear regression or exponential regression best? Why? (6 pts) 13. _____

_____

Ryan practices throwing darts. From each distance listed below, he throws 10 darts and records how many times he hits the center.

Distance (in feet)	2	5	7	8	10	12	15
Number of Center Hits	10	9	8	6	5	1	2

14. Make a scatter plot of the data. Draw the trend line. (4 pts)



15. Write the equation that best fits the information above. 15._____
State the correlation coefficient (r). (6 pts)

16. How many hits do you estimate Ryan would make from 9 feet? (6 pts) 16._____