

FST

Name _____ Date _____

Chapter 2 Study Guide

1. Explain the difference between extrapolation and interpolation. Provide examples.
2. What is a line of best fit?
3. Given three points and your calculator, explain how you would find a quadratic model to fit the data.
4. Explain the difference between observed values and predicted values.
5. How is the error calculated?
6. What is a residual?

7. Given a scatterplot of the independent variable versus the residual, what conclusions can you draw about the model? Provide a few sketches to help explain your answer.

8. What is a correlation coefficient? What are the possible values it can have?

9. Sketch 3 scatterplots that satisfy the following. Be sure to label your scatterplots.

- (1) data with a perfect positive correlation
- (2) data with a correlation coefficient of zero
- (3) data with a perfect negative correlation

10. Explain the difference between the greatest integer function and the ceiling function. Provide examples.