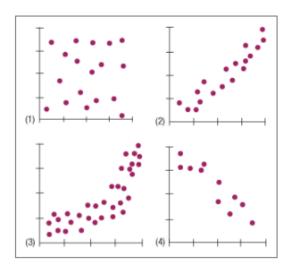
## Question 1(Chapter 6 #14)

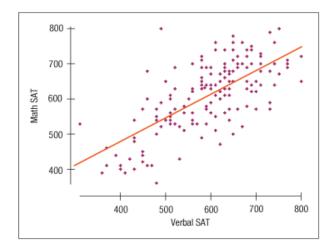
## 14. SCATTERPLOTS II Which of the scatterplots below show



- a. little or no association?
- b. a negative association?
- c. a linear association?
- d. a moderately strong association?
- e. a very strong association?

## Question 2(Chapter 7 #41)

41. SAT SCORES The SAT is a test often used in the U.S. as part of an application to college. SAT scores are between 200 and 800. Tests are given in both math and verbal areas. Doing the SAT-Math problems also involves the ability to read and understand the questions, but can a person's verbal score be used to predict the math score? Verbal and math SAT scores of a high-school graduating class are displayed in the scatterplot, with the regression line added.



- a. Describe the relationship.
- b. Are there any students whose scores do not seem to fit the overall pattern?
- c. For these data, r=0.685. Interpret this statistic.
- d. These verbal scores averaged 596.3 with a standard deviation of 99.5, and the math scores averaged 612.2 with a standard deviation of 96.1. Write the equation of the regression line.
- e. Interpret the slope of this line.
- f. Predict the math score of a student with a verbal score of 500.
- **g.** Every year some student scores a perfect 1600. Based on this model, what would that student's residual be for their math score?