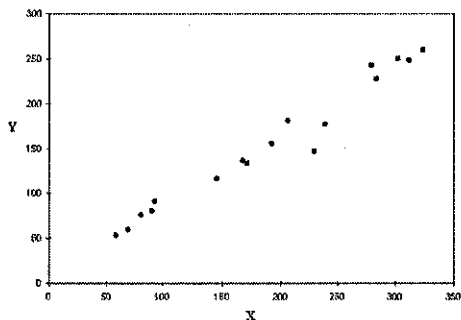


Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Advance Math 7 Study Guide

**Determine whether or not each scatter plot has association or no association. If the scatter plot has association describe the association as positive or negative and linear or nonlinear.**

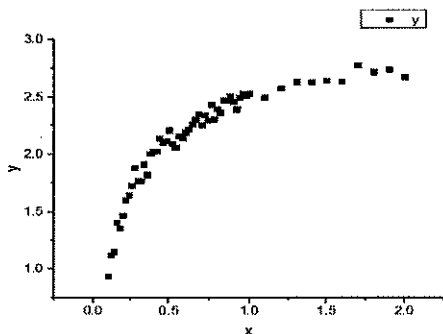
1.



Answer: \_\_\_\_\_

\_\_\_\_\_

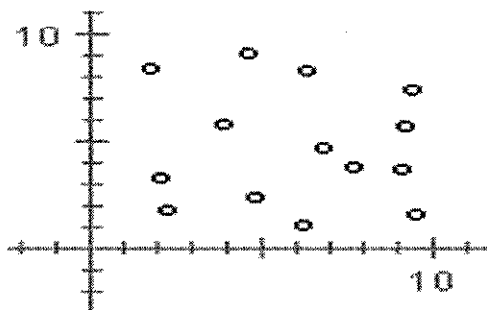
2.



Answer: \_\_\_\_\_

\_\_\_\_\_

3.

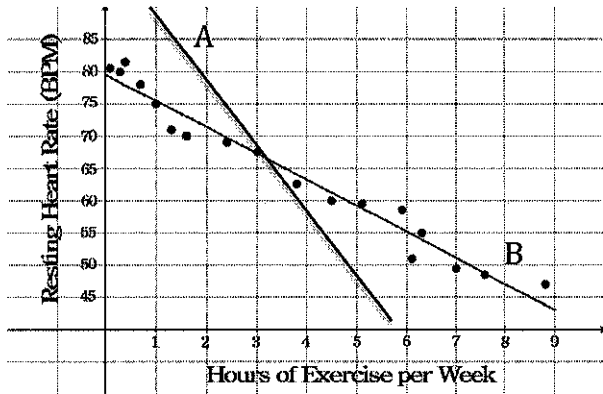


Answer: \_\_\_\_\_

\_\_\_\_\_

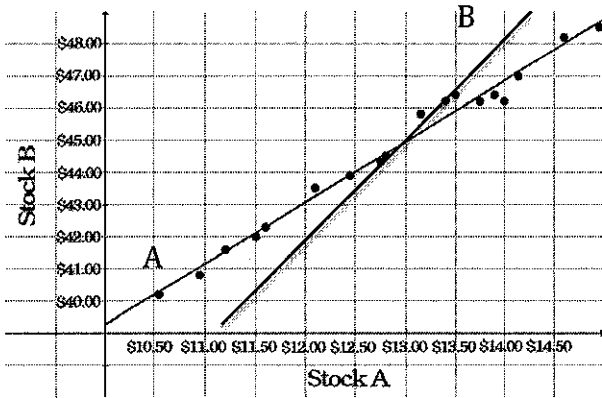
**Determine which line is the appropriate line of best fit.**

4.



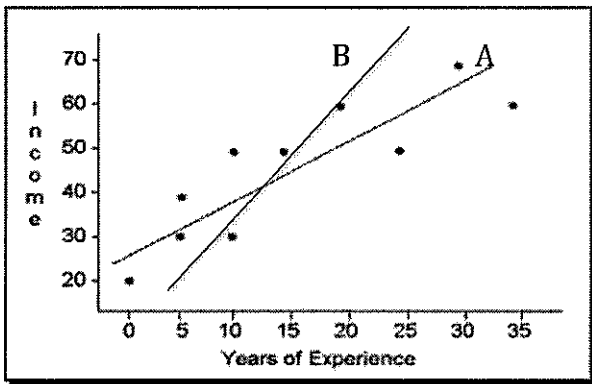
Answer: \_\_\_\_\_

5.



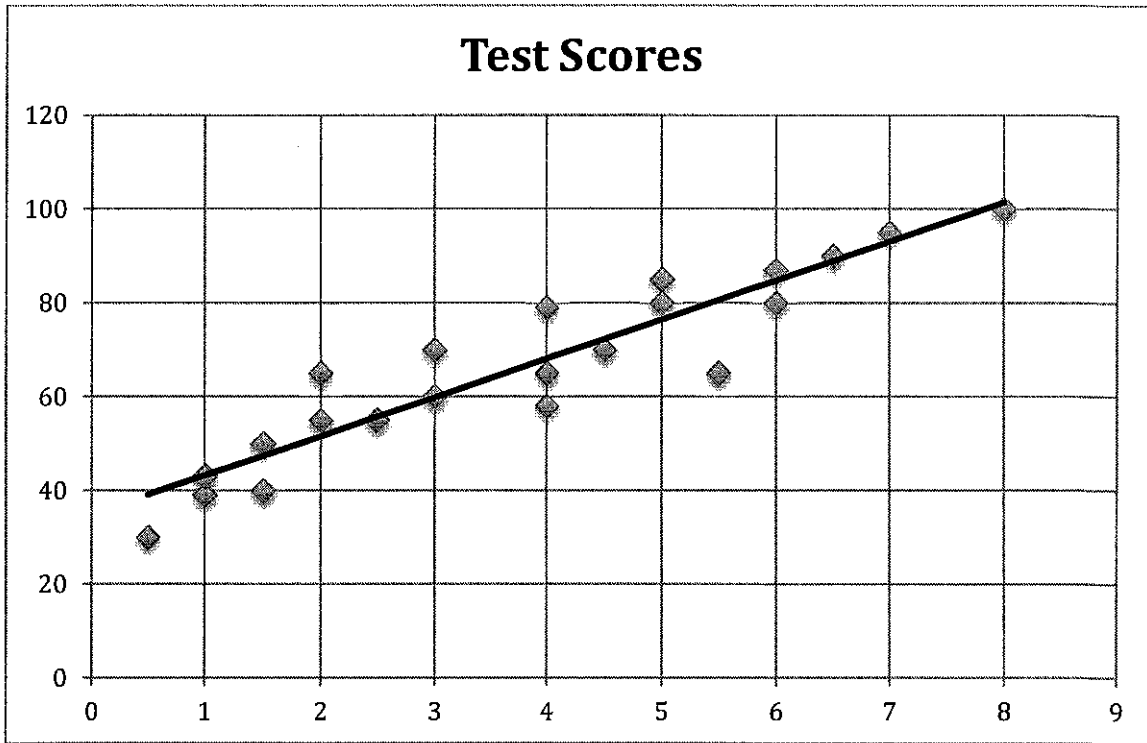
Answer: \_\_\_\_\_

6.



Answer: \_\_\_\_\_

TEST SCORES



HOURS STUDIED

Use the scatter plot above to answer questions 7 - 10.

7. As the number of hours studied \_\_\_\_\_ (increased, decreased) the test score \_\_\_\_\_ (increased, decreased).

8. Write an equation that represents your line of best fit.

9. In one complete sentence, what does the slope mean in the context of the situation? (HINT look at the slope in fraction form)

10. Using your linear equation, calculate the score a student could assume they would get if the studied for 5.5 hours.

Using the following information, construct a two-way table.

11. Charles surveyed 150 boys and girls to see who could roll their tongue and who cannot roll their tongue. He discovered that 50 girls couldn't roll their tongue. And out of the 85 boys that took the survey, 37 of them can roll their tongue.


Use the following table to answer questions 12 - 14

	Have a cat	Do not have a cat	Total
Have a dog	4	49	53
Do not have a dog	11	16	27
Total	15	65	80

12. What is the relative frequency of people who have a dog and also have a cat?

13. What is the relative frequency of people who do not own a dog or a cat to all the people who do not own a cat?

14. What is the relative frequency of people who own a cat and not a dog to all the people who own a cat?