

NAME: _____

Statistics and Probability

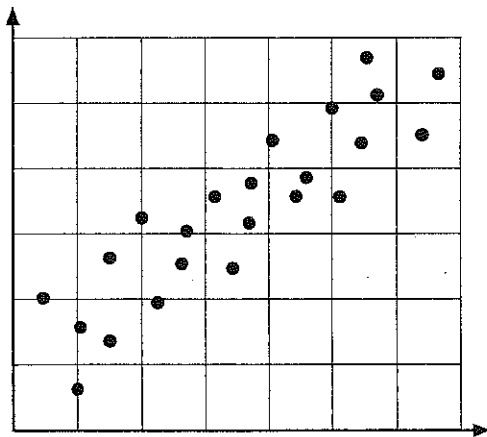
Set 1: Data and Relationships

Station 1

Work with your group to answer the following questions about scatter plots.

1. Anastasia earns high scores on her vocabulary quizzes because she studies a lot! Anastasia's teacher made a list of the most recent quiz scores of 30 of her students. Then she asked each student how many minutes he or she studied for the quiz. She made a scatter plot with the data. What do you think the scatter plot might have shown? Explain.

2. Examine the scatter plot below. What type of relationship do you see between the two sets of data?



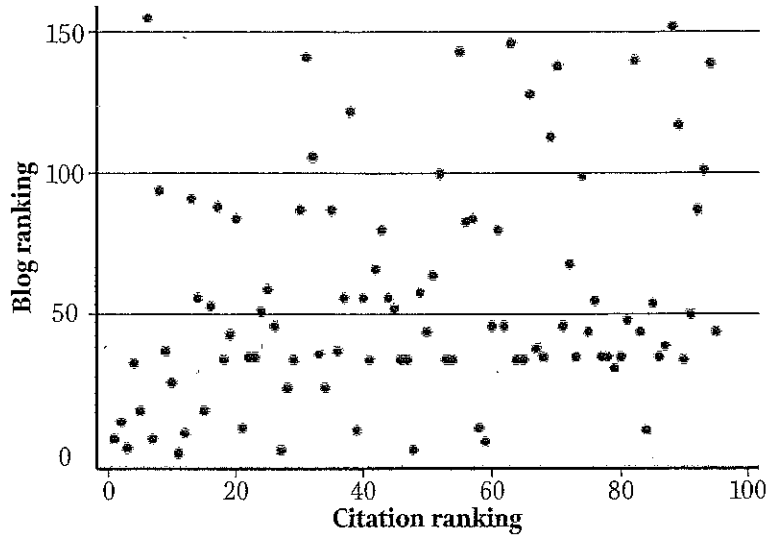
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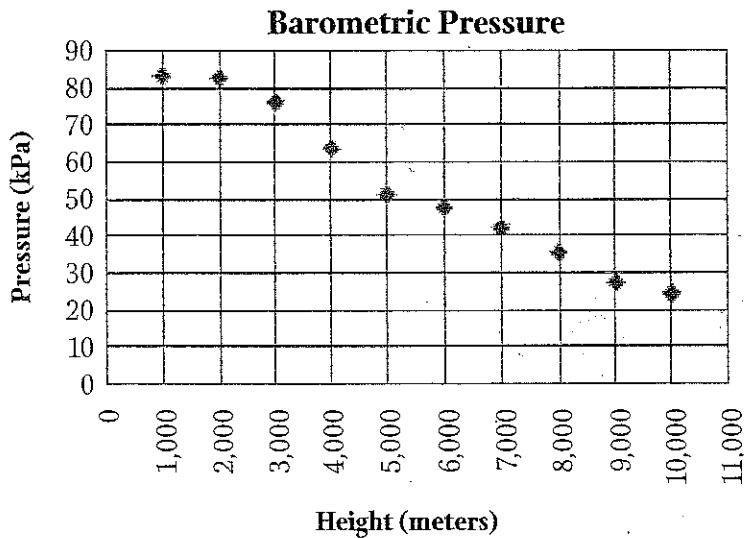
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3. The scatter plot below shows the relationship between two different rankings for blogs. It shows how a number of blogs were rated in each system. How would you describe the relationship?



4. Which of the following statements describes the relationship shown in the scatter plot? Circle the letter of the best answer.



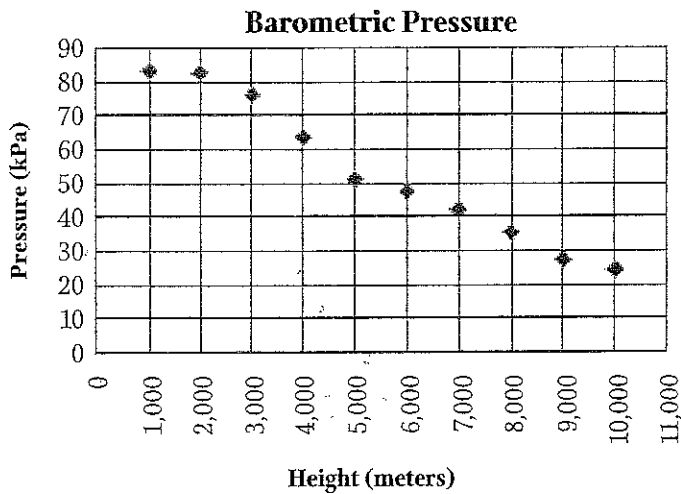
- a. As the height decreases, the pressure increases.
b. As the height decreases, the pressure decreases.
c. As the height increases, the pressure increases.

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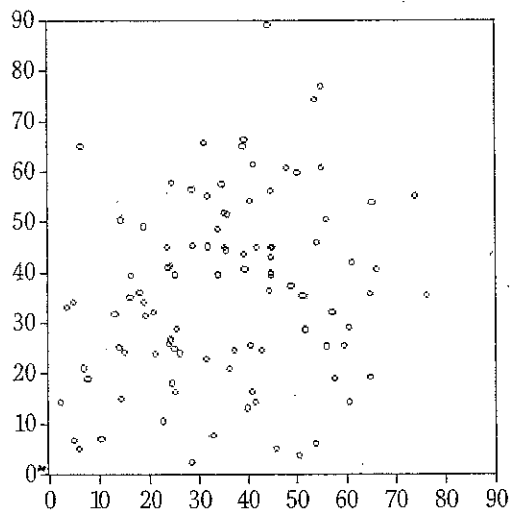
Work with your group to answer the following questions about scatter plots.

5. Examine the scatter plot below.



- What pressure would you expect at a height of 7,500 meters? _____
- At what height would you expect a pressure of 10 kPa? _____

6. Examine the scatter plot below. The x -axis shows the number of dollars each man spent at the mall on Saturday. The y -axis shows the number of e-mails each man sent last week.



- What relationship do you see in the scatter plot?
- Are you surprised by the results of the scatter plot? Explain.

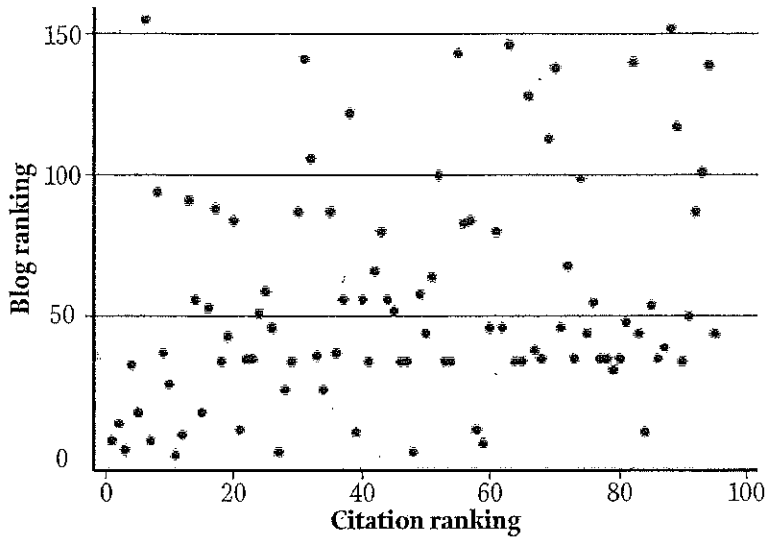
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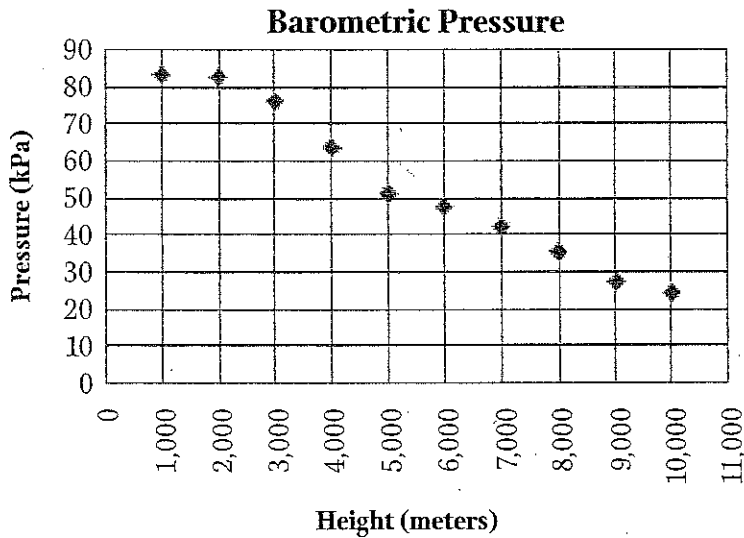
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7. The scatter plot below shows the relationship between two different rankings for blogs. It shows how a number of blogs were rated in each system. How would you describe the relationship?



8. Which of the following statements describes the relationship shown in the scatter plot? Circle the letter of the best answer.



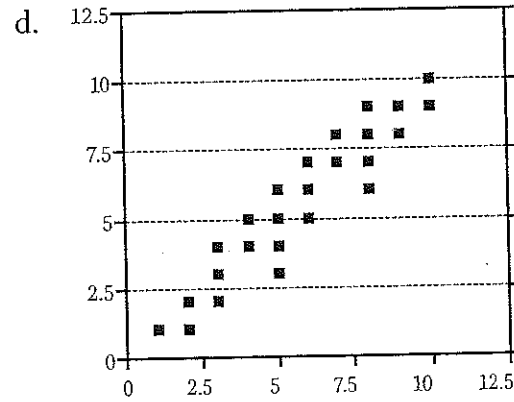
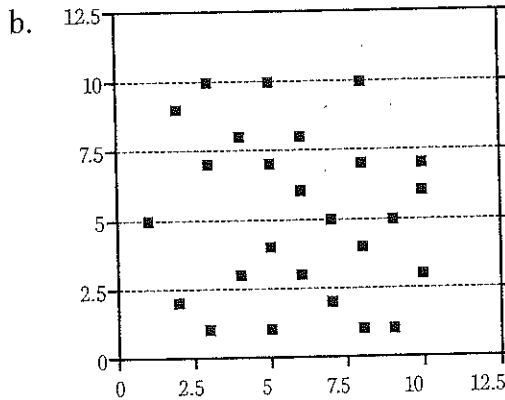
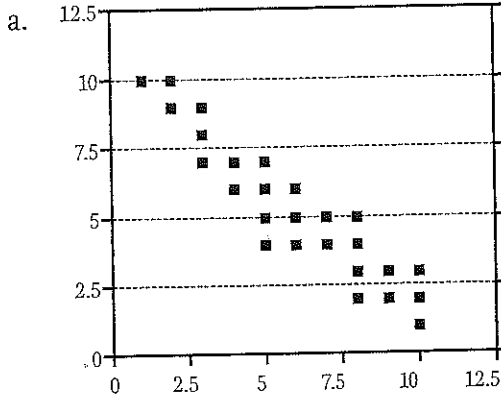
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9. Which scatter plot(s) below show(s) a negative correlation between the two sets of data? Circle the letter(s) of the best answer(s).



10. The scatter plot below shows the age and height of a sample of individuals. If you added a mark for a 25-year-old who is 76 cm tall, would that fit the relationship exhibited in the scatter plot? What relationship does the scatter plot show? Explain.

