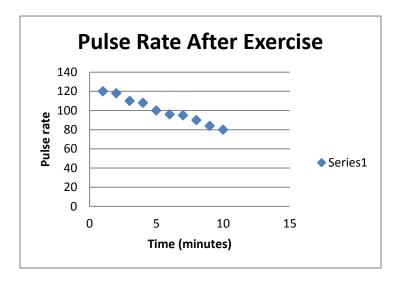
## Sensors and Scatterplots Activity – Pre-Activity Assessment – Sample Answers

## **Directions**

For each scatter plot below, answer the associated questions. Please use complete answers.

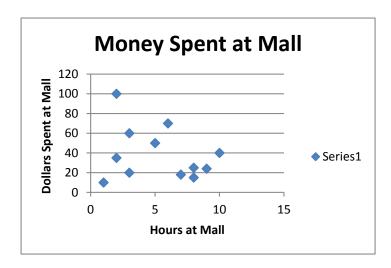
1.



a. The above plot shows a relationship a person's pulse rate after exercise and time. Describe the relationship shown between the two variables.

As more time goes by after a person stops exercising, their pulse rate decreases.

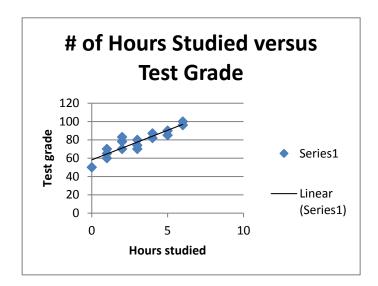
2.



a. Is there a positive correlation, negative correlation, or no correlation between the dollars spent at the mall and the number of hours shopping at the mall? Explain.

No correlation exists between the dollars spent at a mall and the number of hours spent shopping at the mall.

3.



- a. The above scatterplot shows test grades and hours studied for a group of students. Describe the relationship between test grade and the number of hours studied.
  - A student's test grade increases as the number of hours spent studying increases.
- b. Use the line of best fit in the scatterplot above to predict what grade a student will get if she studied four hours.
  - I predict that a student will get a grade of 80 if she studies 4 hours.