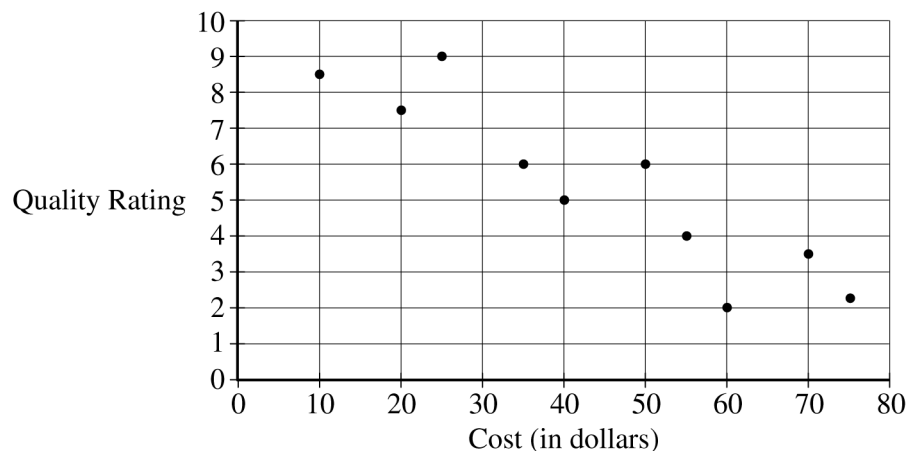2. Dr. Knowles is interested in exploring the relationship between garment cost and perceptions of clothing quality. She predicts that higher-priced clothing will be perceived as being of higher quality. She creates a Web site that presents floral shirts listed at a variety of prices. Participants are directed to the Web site, where they are asked to rate the quality of each shirt (on a 1 to 10 scale, with higher numbers meaning better quality). The data collected are presented in the scatterplot.

Part A

- State the hypothesis that Dr. Knowles tested in the study.
- Identify the operational definition Dr. Knowles used for quality.
- Identify the type of relationship found between the variables of interest in the study.
- Explain why Dr. Knowles cannot generalize the results of her study to the general population.

Part B

Explain how each of the following could affect participants' perceptions of the floral shirts on the Web site.

- Mere-exposure effect
- Cones of the retina
- Prototype

_____

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

GO ON TO THE NEXT PAGE.

Question 2: Research Design — 7 points

General Considerations

1. Answers must be cogent enough for the meaning to come through. Spelling and grammatical mistakes do not reduce a score, but spelling must be close enough so that the reader is convinced of the word.

2. A response can earn points only if the student clearly conveys what part of the question is being answered. It is possible to infer the part of the question being answered if it is consistent with the order of the question.

3. The response must apply the concept to the prompt. A definition alone will not earn the point, but a clear definition can support the application.

4. Examples provided in the Scoring Guidelines for each of the points are not to be considered exhaustive.

5. Within a point, a response will not be penalized for incorrect information unless it *directly contradicts* correct information that would have otherwise earned the point. For example, if a response applies a concept in two contradictory ways (such as identifying both the measured variables as the independent variable or describing proactive interference as interference from both older and newer information), the point is not earned. Additionally, a response will not score if it includes a correct answer among multiple incorrect answers related to the same general concept/theory (e.g., a response that describes the Big Five trait of conscientiousness as being diligent, trusting, highly emotional, outgoing, and intellectually curious).

6. Within a bulleted question part, if the response addresses details from a scenario other than the one in the prompt, the point is not earned.

Part A   Dr. Knowles is interested in exploring the relationship between garment cost and perceptions of clothing quality. She predicts that higher priced clothing will be perceived as being of higher quality. She creates a Web site that presents floral shirts listed at a variety of prices. Participants are directed to the Web site, where they are asked to rate the quality of each shirt (on a 1 to 10 scale, with higher numbers meaning better quality). The data collected are presented in the scatterplot below.
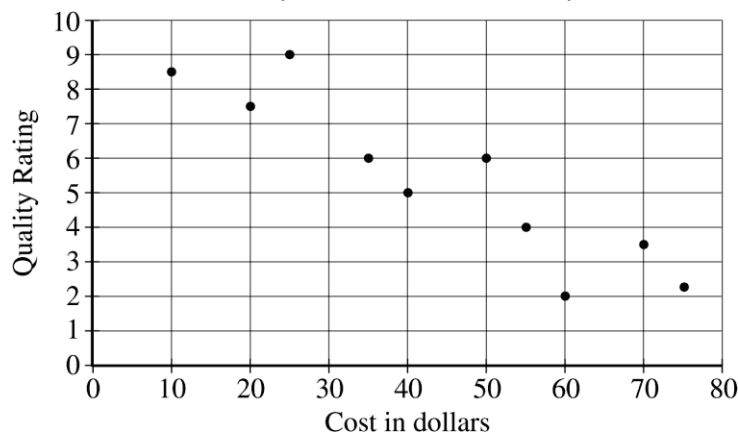
| **State the hypothesis that Dr. Knowles tested in the study.** | **1 point** |

The response must indicate that Dr. Knowles hypothesized that higher priced clothing would be perceived as being of higher quality.

OR

The response must indicate that there would be a positive/direct correlation (e.g., relationship, association, etc.) between price and perceived quality.

Acceptable explanations include:

Response must name both variables with the correct direction of the relationship.

- *The perceived quality of the shirts is positively correlated with price.*

Unacceptable explanations include:

Responses without an explanation of the correlation.

- *Dr. Knowles hypothesized there would be a correlation between price and quality rating.*

| **Identify the operational definition Dr. Knowles used for quality.** | **1 point** |

The response must indicate that Dr. Knowles operationally defined quality as score on the rating scale.

Acceptable explanations include:

- *Dr. Knowles operationally defined quality as a score from 1 to 10.*

Unacceptable explanations include:

Responses that refer to the rating scale without referring to a score from 1 to 10.

- *The operational definition is the rating of the shirt.*

| **Identify the type of relationship found between the variables of interest in the study.** | **1 point** |

The response must indicate that the relationship between the variables is a negative/inverse correlation/relationship/association.

Acceptable explanations include:

- *It is a negative correlation.*

Unacceptable explanations include:

Responses that refer to a correlation alone without indicating its direction.

Responses that refer to a description of a negative correlation alone without using the acceptable terms.

- *There is a correlation between cost of shirt and perceived quality.*

- *As the cost of the shirts goes up, the perceived quality goes down.*

Prototype **1 point**

The response must indicate that the participants' perceptions of the shirts are influenced by their idea of the best, ideal, or most typical shirt.

Acceptable explanations include:

- *Participants compare their ideal of what a floral shirt should look like to the shirts on the Web site.*

Unacceptable explanations include:

- *Dr. Knowles made a shirt prototype first, then made all the other shirts based on the prototype.*

Total for question 2 **7 points**