A

1.a) I think there is a connection between hieght and footsize. As the hieght increases so should the foot size.

b) – whether they measured their foot with their shoe on.
– whether they made a mistake when they measured
– if you copied it down wrong
There is no recognizable trend between hieght and foot size.

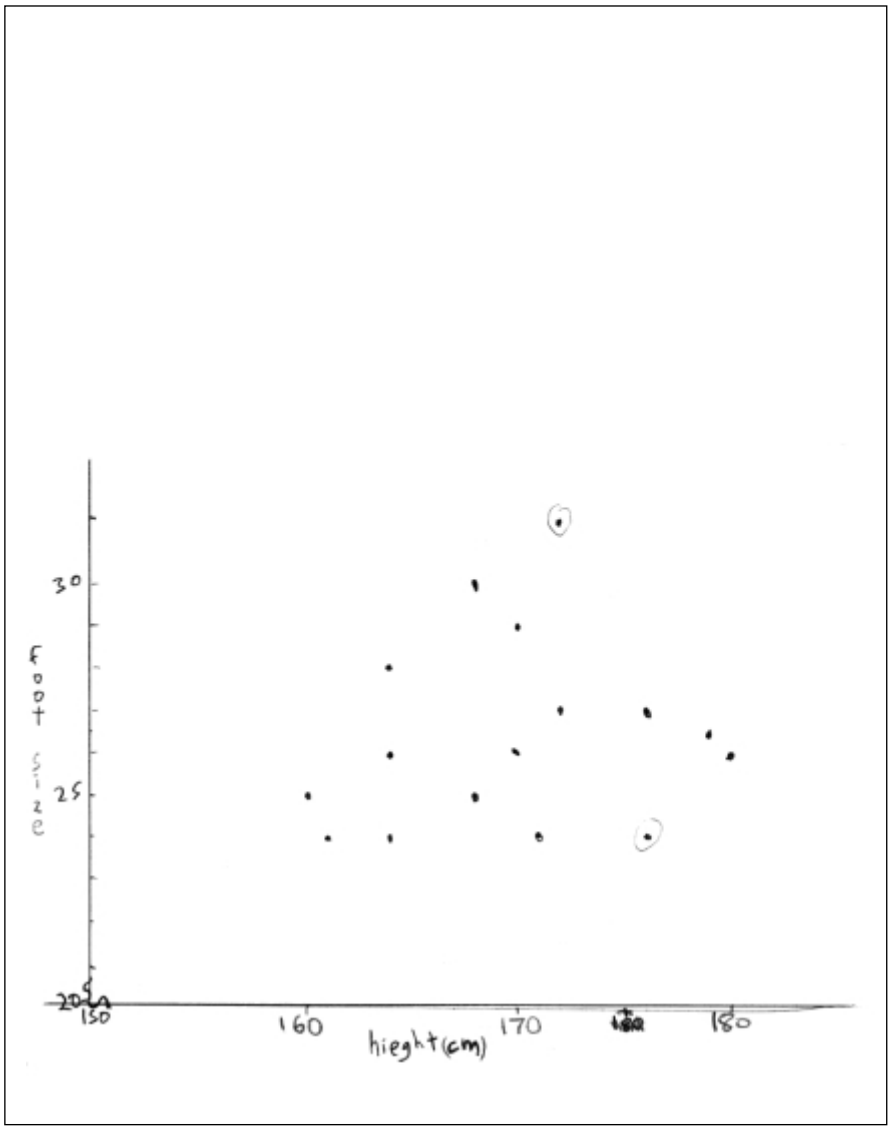
3. My Hypothesis was not accurate. there might be a connection between hieght and footsize. but my graph doesn't show any trend. I think I need more information from a larger age range.

Another form of sittuations could be heartrate and age cause the older you are the more worn out your heart gets.

B

student	age	sex	foot size	hieght
1	15	male	27	126
2	14	male	29	170
3	16	male	24	164
4	15	male	26	170
5	15	male	28	164
6	15	female	24	171
7	16	male	27	172
8	14	male	26	180
9	15	female	24	161
10	15	male	24	176
11	14	male	25	168
12	15	male	30	168
13	15	male	33	172
14	15	male	24	160
15	15	male	26.5	179
16	15	female	26	164

C



Teacher's Notes

Knowledge/Understanding

- The student demonstrates some understanding of a relational hypothesis by looking for a "connection between" the variables.
- The student shows knowledge of a continuum (e.g., "as the hieght increases . . .")
- The student's rationale in identifying and explaining factors that affect the validity of the data collected is somewhat effective.

Thinking/Inquiry/Problem Solving

- The student demonstrates some skill in accurately recognizing the random dispersion of the data (e.g., "There is no recognizable trend").
- The student draws a conclusion from the data and addresses the relational contradiction between the hypothesis and the conclusion with some detail (e.g., argues for "more information from a larger age range").

Communication

- The student chooses a scale that shows the data with some organization and clarity.
- The student communicates graphically, demonstrating some skill in the use of proper form, but uses breaks in the axes inappropriately.

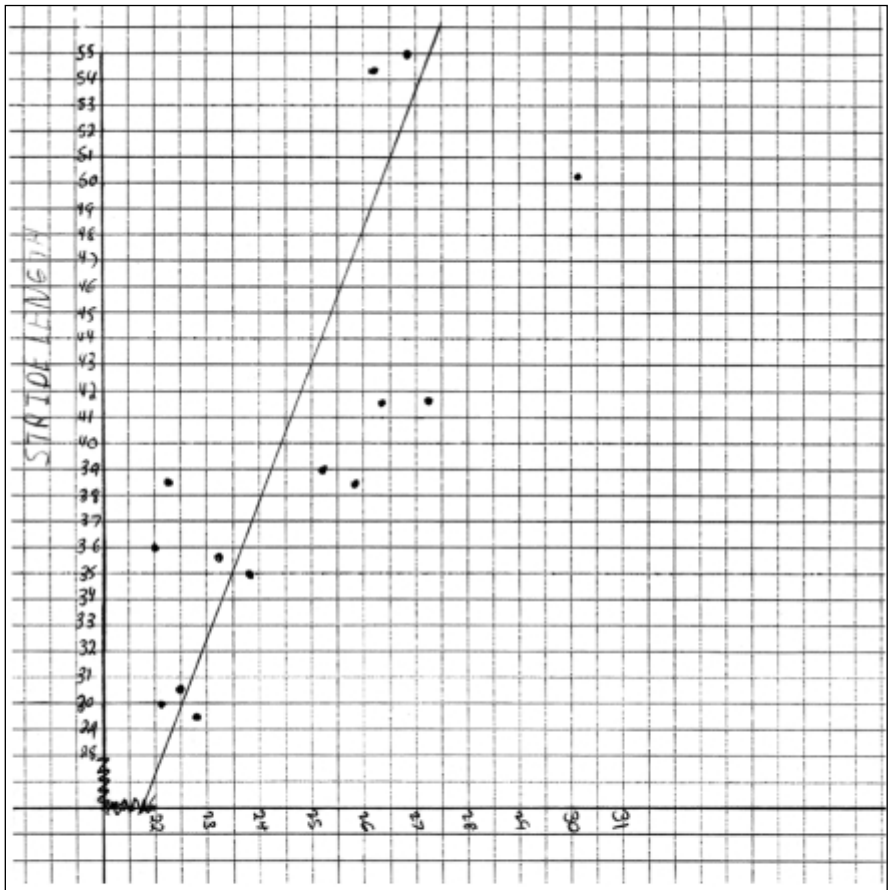
Application

- The student identifies a realistic application with some detail (e.g., "the older you are the more worn out your heart gets").

Comments/Next Steps

- The student should include an appropriate title for the graph and should be careful to identify units in the table of values and the graph.
- The student needs to give more detail in the explanations and the reasoning.

A



2b) The dispersion of the data in the scattergrape are ramdonly distributed.

B

3a) Is it reasonable for two people with the same foot length to have different stride lengths.

b) I think that people with smaller feet have smaller strides.

They could try and increase their pace (stride) of their walk. Or change shoe size.

4.

stride length	foot size
50.2	30.2
38.5	25.9
55	26.9
54.4	26.2
30.5	22.5
41.6	26.4
39	25.3
41.8	27.3
30	22.1
29.5	22.8
38.5	22.3
35	23.8
35.7	23.3
36	22

Conclusion - There is a relation ship between the data. The relation ship is the longer the stride the bigger the foot, in most cases.

C

4) Anothe situation in which it would be inportant to identify a relation ship between two variables are height and leg length. They relate by the taller you are the longer the legs.

Teacher's Notes

Knowledge/Understanding

- The student states a hypothesis that includes only one end of a spectrum, demonstrating some understanding of a relational hypothesis.
- The student identifies some factors that affect the validity and accuracy of the data collected and gives only some explanation of those factors.

Thinking/Inquiry/Problem Solving

- The student uses a line of best fit to indicate that a trend exists and describes the dispersion with some accuracy and detail (e.g., "the data . . . are ramdonly distributed").

Communication

- The student communicates graphically, showing some skill in graph construction (e.g., uses appropriate axes and scales but omits a title and some necessary labels and units).
- The student demonstrates some organization and clarity of reasoning (e.g., "Anothe situation in which it would be inportant to identify a relation ship between two variables are height and leg length").

Application

- The student identifies a realistic application.
- The student states some detail in the explanation about the application (e.g., "the taller you are the longer the legs").

Comments/Next Steps

- The student should include appropriate titles, labels, and units when graphing.
- The student could provide more detail in explanations to better convey the reasoning.