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1. To study about the relationship between height and the weight, you need to collect a sample of nine (9) people using a systematic sampling method.

a. What is the population of people? Where and how are you going to collect your sample? Does your sample accurately represent your population? Why or why not?

b. Collect the sample and record the data.

	Person 1	Person 2	Person 3	Person 4	Person 5	Person 6	Person 7	Person 8	Person 9
Height (inches)									
Weight (lbs)									

2. (CLO 1) Construct a confidence interval to estimate the mean height and the mean weight by completing the following:

a. Find the sample mean and the sample standard deviation of the height.

b. Find the sample mean and the sample standard deviation of the weight.

c. Construct and interpret a confidence interval to estimate the mean height.

d. Construct and interpret a confidence interval to estimate the mean weight.

3. (CLO 2) Test a claim that the mean height of people you know is not equal to 64 inches using the p-value method or the traditional method by completing the following:

a. State H_0 and H_1.

b. Find the p value or critical value(s).

c. Draw a conclusion in context of the situation.

4. (CLO 3) Create a scatterplot with the height on the x-axis and the weight on the y-axis. Find the correlation coefficient between the height and the weight. What does the correlation coefficient tell you about your data? Construct the equation of the regression line and use it to predict the weight of a person who is 68 inches tall.

5. Write a paragraph or two about what you have learned from this process. When you read, see, or hear a statistic in the future, what skills will you apply to know whether you can trust the result?

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