

Investigating Graphs Class Activity

Question: *What is the relationship between your arm span and height?*

Procedure:

1. In pairs, students will measure each other's arm span and height. This information will be recorded in the table below. Students will swap information so that they have 2 sets of data at this point.
2. Each student will ask at least 8 other people for their data so that they fill the table with a total of 10 sets of data.
3. Students will graph this data, with arm span on the y-axis and height on the x-axis. A line of best fit will be drawn through the data.
4. After the graph has been constructed, students will consider the following questions:
 - a. What is the x-intercept and what does it represent?
 - b. What is the y-intercept and what does it represent?
 - c. Should the graph contain negative values of x and y? Explain.
 - d. What is the slope of the graph? Why is it positive? Relate it to the rate of change for this scenario.
 - e. If two students graphed the same 10 data values, would they end up with the same rate of change? Explain.
 - f. What if you wanted to determine the arm span of someone whose height is not represented by one of the data values? How could this be done?

Student Data

[illegible]