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Foot Length and Height -Algebra Graphing Project

## BELLWORK

Is there a correlation between your height and the length of your foot?
I Working with your assigned partner, you are to measure your height and the length of your foot in centimeters.

Partner \# 1 height $\qquad$ Partner \#1 foot $\qquad$
Partner \#2 height $\qquad$ Partner \# 2 foot $\qquad$
II Record your results on the class chart then enter the information on the table below.

| Height (cm) | Foot (cm) |  | Height (cm) | Foot (cm) |
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III On your graph paper, you first need to create an $X$ and $Y$ axis. You also need to decide on intervals. This is completely up to you and your partner. However, all data must fit on your graph.

- Your graph should start at the origin
- X axis will represent foot length (must be labeled)
- Y axis will represent height (must be labeled)

IV For this project, you will use a scatter plot.

- Be sure to use all of the information from the class chart.
$\checkmark$ Write the line of best fit (This is an equation):

VI Answer the following question with your partner.
Is there a correlation between your height and the length of your foot?
Explain. Be specific using information gathered in this project (for example, mention a particular person(s) height and foot length).

VII Make your results presentable.

- Paste your graph on a piece of construction paper
- Create a title
- Brief summary of what you and your partner did
- Paste your line of best-fit equation on the construction paper
- Paste the question and your response to part VI

VII Now, create your graph on Desmos.

- You must show this to Mr. Poff to receive credit for this part.

|  | Points Possible | Points Earned |
| :--- | :---: | :--- |
| Height and foot measured | 5 |  |
| Scatter Plot created | 5 |  |
| Title is created | 10 |  |
| Labeled X and Y axis correctly | 15 |  |
| Graph is correct; glued to <br> construction paper | 10 |  |
| Line of best fit is calculated; <br> glued to construction paper | 15 |  |
| Summary of what the project <br> was about and how it was <br> completed | 10 |  |
| Answer to the question | 10 |  |
| Desmos graph was correct and <br> shown to Mr. Poff | 20 |  |
| Total Points Possible |  |  |

