Unit 17 Lab Activity

Name:_____

Period:_____ Date:_____

The Shoe-Height Connection

Overview:

In this lab we will be:
- Collecting data
- Putting the data in a table
- Creating a scatter plot with the data
- Determining the correlation, if any
- Constructing a line of best-fit
- Generating an equation for that line

Materials:

- Tape measure
- Data table
- Graph paper
- Ruler
- Graphing calculator

Procedure:

1. With a partner, measure the length of your shoe(cm) and your height (cm).
2. Record results on the class data table as an ordered pair: (shoe, height)
3. Set up a graph for the data. Label the axes x=shoe length(cm), y=height(cm)
4. Decide on the Range:_____ Domain:_____ Interval:_____
5. Make a scatter plot with all the data.
6. Draw in a line of best fit.
7. Calculate the slope and y-intercept of your line.
8. Write the equation of your line on the graph and on the board.
9. Load the data onto the graphing calculator under the statistics menu.
10. Have the calculator generate a line of best fit.

Class Data Table

	Shoe Length (cm)	Height (cm)
1.		
2.		
3.		
4.		
5.		
6.		
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34.		

Scatter Plot
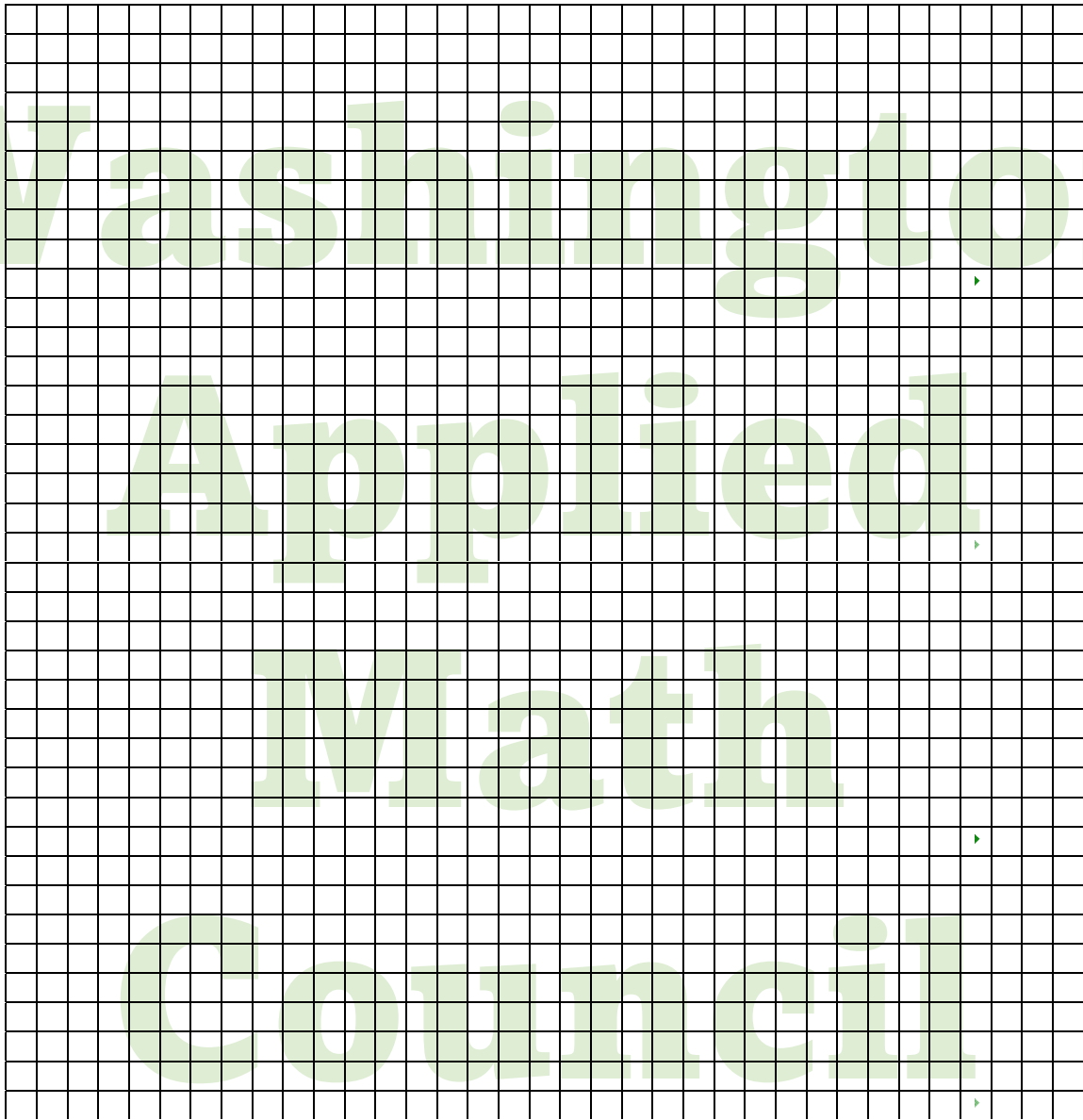
Linear Equation:_____

Slope:_____   Meaning:_____

y-intercept:_____   Meaning:_____