Task 1— Smartwatch Task – Your Watch, Your Way!

Part 1: You have been asked to design a smartwatch that will have the largest possible screen while minimizing the cost.

Work with your team and come up with <u>at least 3</u> designs and draw a rough sketch of each smartwatch.

	1: _____	2: _____	3: _____
Design & Drawing			
Dimensions			
Assumptions & Considerations			

Part 2: Following all the proposed smartwatches, the manufacturer has agreed to fund your proposal of a smartwatch that should have the **largest screen size** while having a distance around of specifically 14 inches.

1. What shape and specific dimensions do you choose for the smartwatch?
Clearly show your work including any drawings.

2. Consider other shapes that would have a distance around of 14 inches? How do these areas (screen sizes) compare?

3. What mathematical concepts did you have to understand to effectively engage in this smartwatch design task?

4. What did you learn through this task?

Task 2—Teacher Salaries

In the provided spreadsheet you will find 2014-2015 salaries of 79 Washington State Elementary public school teachers, along with the districts they taught in. These teachers are the teachers with the lowest number of years of experience in the state.

https://goo.gl/92yxR8 (case sensitive)

Task written by Ksenija Simic-Muller (2017) in the book *Reflecting the World: A Guide to Incorporating Equity in Mathematics Teacher Education*

Part 1:

Use at least one data analysis tool to draw some conclusions about the salaries of these teachers. Write a paragraph summarizing your findings

Part 2:

A. Suppose the 79 teachers from the first part are all at a teacher conference together. Bill Gates, who is also interested in education, and who earns about $3.7 billion per year, is sitting in the room. What is the average salary of the people sitting in that room? Explain.

B. How long does Bill Gates have to work to earn as much as the average teacher in that room?

C. How long would the average teacher have to work to earn what Bill Gates earns in a year?

Part 3: Extension—

Let's say Bill Gates wants to help raise all Washington teachers' salaries. Create a proposal for how to do this, detailing how much money he will need to spend, and what impact that will have on his overall earnings. *Note: (1) You may need to conduct some additional research to find out how many teachers there are in Washington State, how much they make on average, etc. (2) Think about whether raises are flat sums or percent increases, teachers' years of experiences, and other factors.*