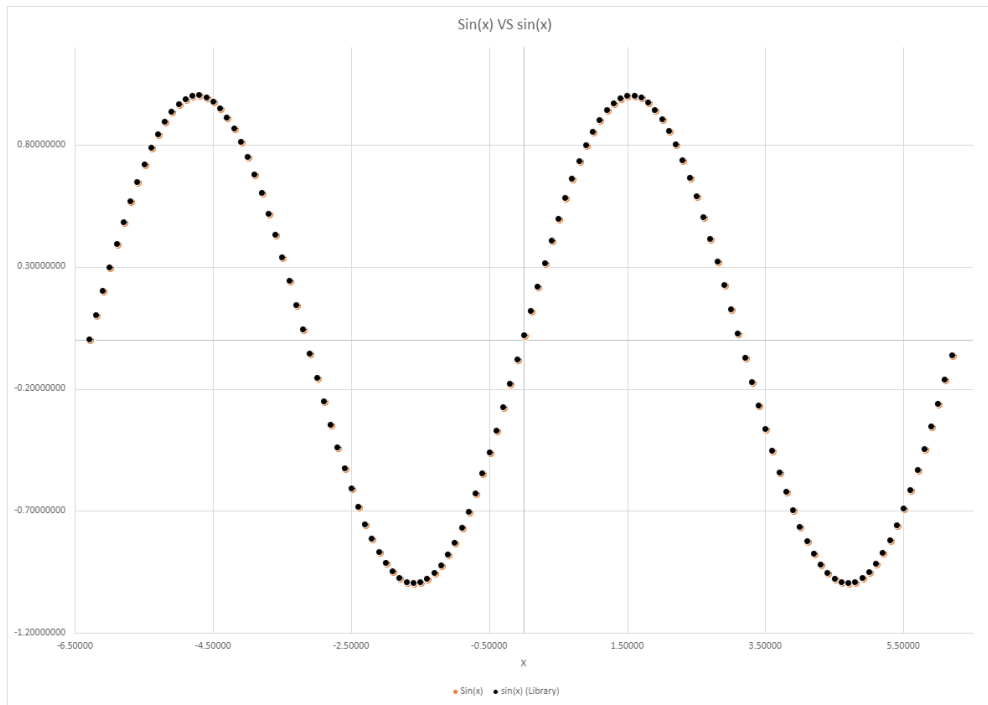
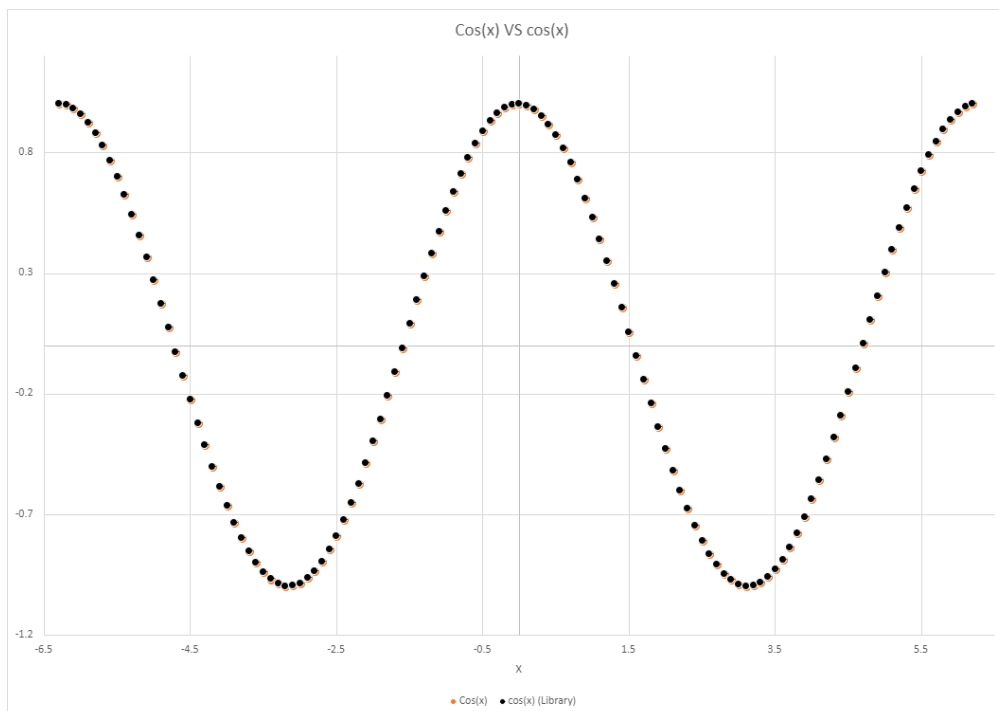


Michael Walters
1/24/2021
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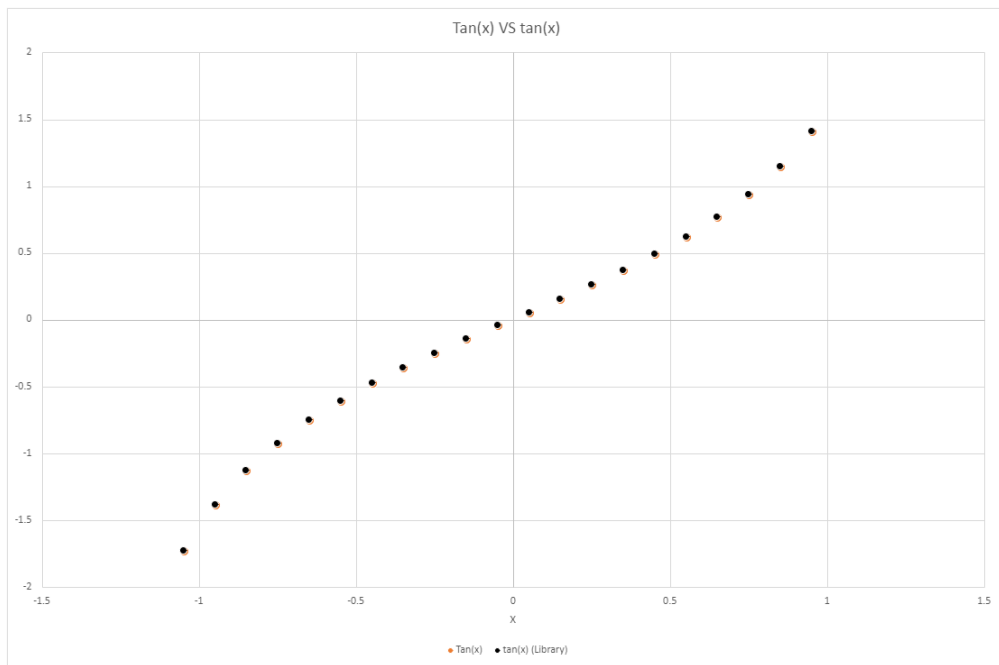
Results of my Sin() function compared to the math library's sin() function:



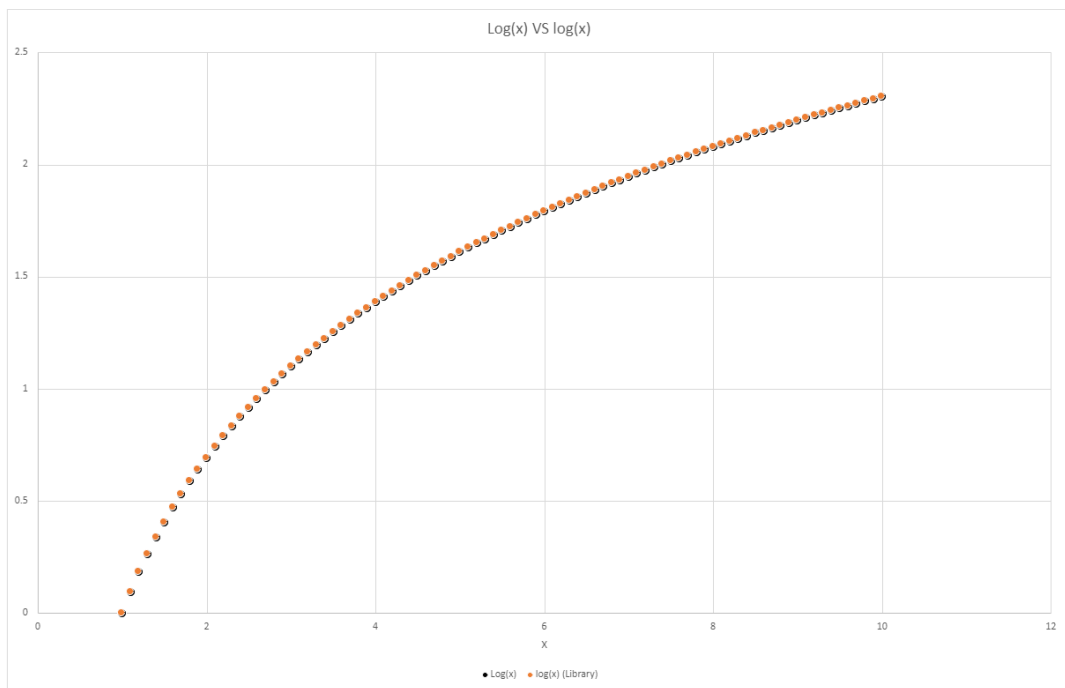
Results of my Cos() function compared to the math library's cos() function:



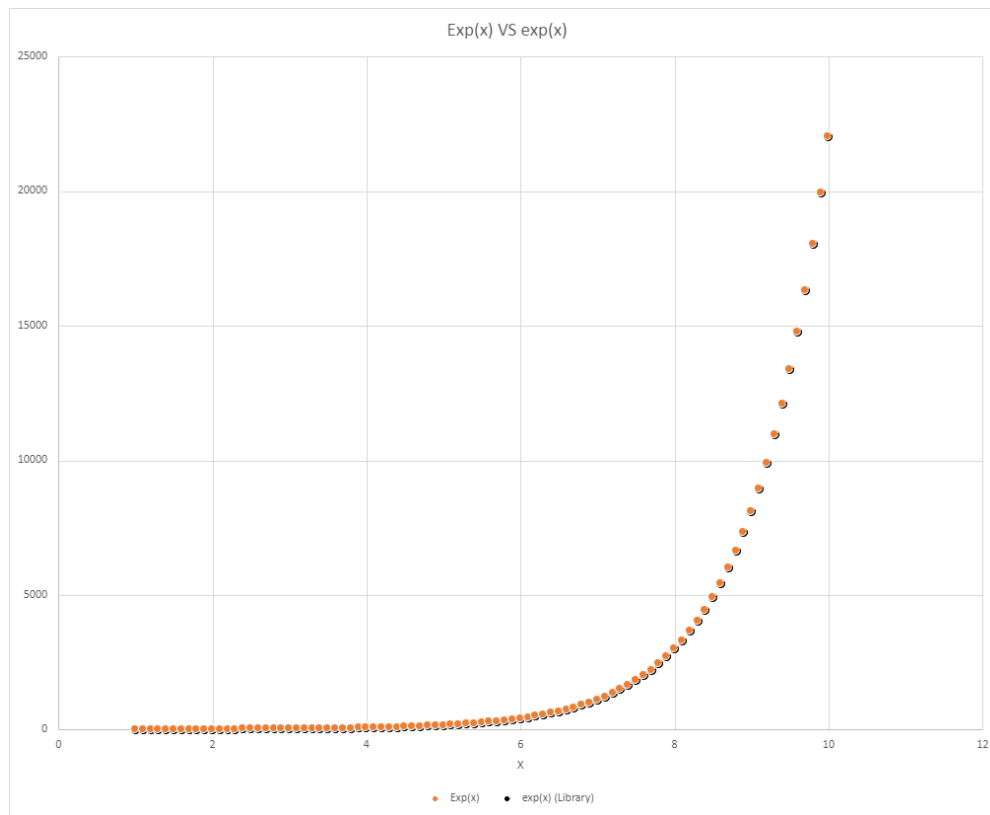
Results of my Tan() function compared to the math library's tan() function:



Results of my Log() function compared to the math library's log() function:



Results of my Exp() function compared to the math library's exp function:



When looking at these graphs it is clear that there is a very slight difference between my output and the output of the math library's function. My function is always going to have a lower value on the Y-axis. This is because with more digits available past the decimal point, the library function is always going to result in a higher value. In other words, our functions are limited by the EPSILON we put in place to stop adding terms to our summation. The math library function was able to keep adding small values resulting in a higher value overall.

As you can see when looking at the graph, it is very difficult to discern the difference in position between the overlapping black and orange dots. This is because the actual difference is genuinely small, well over ten places past the decimal point.

