Sin(x) function and Cos(x)

From domain of -2PI to 2PI, my approximations were accurate with the math library.
It started getting weird and the difference started to get higher after inputting PI into function. I fixed it by putting in the negative version of the radian. My approximations were fairly on point

Tan(x)

Difference was zero
Sin(x) / Cos(x) was accurate with library

<u>e^x</u>

• My e^x function difference increased as the numbers got bigger. The only way I could fixed the huge difference was to keep adding smaller terms from the taylor series. I ended up adding taylor series for a very long time. I was still off by like 0.0000001 at some inputs. The reason could be that the factorial is too big? Or that I'm implementing too big of exponential. My results aren't far off and limiting decimal point only 8th term made difference to zero.