Class Exercise 1.2

- Determine the first two nonzero terms of the series expansion about zero for the following:

    a. $e^{\cos x}$ b. $\sin(\cos x)$

- What is the series for $\ln(1 - x)$? What is the series for $\ln[(1 + x)/(1 - x)]$? When the expansion point isn't explicitly mentioned, it is c=0

- Establish the Taylor Series for $\sin(x-3h)$

- If the logarithmic Series for $ln(x)$ is to be used for computing $ln2$ with an error of less than $1/2 \times 10^{-6}$, how many terms will be required?