1. Let $I=\int_{0}^{2} e^{\cos (x)} d x$
(a) Calculate $L_{40}$ and $R_{40}$. How close are these to the actual value of $I$ ?
(b) Approximate $I$ accurate within 0.01
2. Let $I=\int_{0}^{\frac{\pi}{2}} x \cos (x) d x$
(a) Calculate $T_{40}$ and $M_{40}$. How close are these to the actual value of $I$ ?
(b) Approximate $I$ accurate within $10^{-6}$
3. Explain how you could have used $L_{n}$ and $R_{n}$ in \#2.
