

1. Let $I = \int_0^2 e^{\cos(x)} dx$

(a) Use Maple to calculate L_{40} and R_{40} .

[Use the leftsum and rightsum commands.]

What can you conclude about how close these are to the actual value of I ?

(b) Use similar ideas, and trial and error, to find an approximation for I that you *know* is accurate within 0.01.

2. Let $I = \int_0^{\frac{\pi}{2}} x \cos(x) dx$

(a) Calculate T_{40} and M_{40} .

How close are these to the actual value of I ?

(b) Approximate I accurate within .0001