

Let $I = \int_0^1 x \sin(x^2) dx$

1. Calculate L_4 by hand.

Does this overestimate or underestimate I ?

2. Use Maple to draw L_{10} and R_{10} .

(Use the `leftbox()` and `rightbox()` commands)

3. Use Maple to calculate L_{10} and R_{10} .

(Use the `leftsum()` and `rightsum()` commands)

How does I compare to L_{10} and R_{10} ?

4. Find the exact value of I by using u -substitution.

Does this make sense?