

Use the Riemann sum command to demonstrate the Fundamental Theorem of Calculus for the following integrands.

You should calculate the derivative of the integral function as we did in class and show that it gives you the function back.

When you can calculate the integral analytically from formulas you have learned in class then you should show how the function you know is similar to the

numerical computation. You may have to take bigger or smaller intervals for the RiemannSum . You may have to adjust parameters

1. $1/x$ #be careful where you take intervals
2. $\sin(x)$
3. $\sqrt{1-x^2}$ #be careful where you take your intervals.
4. $\exp(x)$
5. $x/(x^2+1)$