

*Department of Mathematics*  
*University of Notre Dame*

Daniel Villanueva Vega & Juan Ramirez - University of Notre Dame

*Mathematics Teaching Seminar*

*Date:* Tuesday, April 4, 2023

*Location:* 125 Hayes-Healy Bldg

*Time:* 5:00 pm

*Mock Lecture #1:*

*Title:* Area under a curve

Speaker: Daniel Villanueva Vega

University of Notre Dame

*Abstract:* In this lecture we will talk about how to approximate the area under a curve by using the right and left point approximations using Riemann sums. If time permits, we will discuss some applications.

*Mock Lecture #2*

*Title:* Newton's Method

Speaker: Juan Ramirez

University of Notre Dame

*Abstract:* Newton's Method is a formula used to estimate the roots (solutions) to real-valued functions. With a proper initial guess and conditions on the function, the method provides an efficient way to solve for solutions of polynomials. In this talk we will introduce the method and through the use of examples we will build an understanding of the methods pro's and con's.