



1. Explain why a graph of the tangent line to e^t at $t = 0$ tells us that for all t ,

$$1 + t \leq e^t.$$

2. Substituting $t = 1/x$, show that for all $x \neq 0$

$$e^{1/x} - 1 > \frac{1}{x}.$$

3. Use the comparison test to show that the original integral

SUMMER 2021 TEACHING, TA, AND QUAL PREP INSTRUCTOR OPPORTUNITIES!

The Math Department has summer employment opportunities for Math Grad Students!

The Math Dept. will be offering courses in sessions A (Jun 21-Jul 24), B (Jul 26-Aug 28), and E (Jul 26- Sep 11).

TEACHING ASSISTANTSHIP (TA)

Please complete the:

[Teaching Preferences for Summer 2021](#)

Deadline: February 3, 2021

ASSOCIATE IN (AI)

Please complete the following:

A. [Summer 21: Associate-In Supplemental Interest Form](#)

B. [Teaching Preferences for Summer 2021](#)

C. [UC Bio-Form](#) (download copy to edit)

Deadline: February 3, 2021

WRITTEN QUALIFYING PREP SEMINAR INSTRUCTOR

We're [accepting nominations](#) for 6 quals offered in Fall 2021: Algebra, Applied Mathematics, Complex Analysis, Differential Equations, Real Analysis, and Topology. To [nominate](#) yourself or your peer, please complete the [Wufoo form by 12pm Friday, February 26, 2021](#).

If you would like to be considered for both TA and an AI position please select both when completing your preference form. For a description of the TA and AI positions please visit Graduate Division's website [here](#).

We thank you all in advance for expressing interest in our summer positions! Have questions?

Teaching: Contact Randy at randy.morgan@ucr.edu.

Qual Prep Seminar? Contact Margarita at mroman@ucr.edu.