

L^AT_EX Practice Assignment 3

Due: Week 5 Monday by 5:45pm (via Overleaf invite)

Setup:

- Back up the work that you’ve done so far by going to **menu** and download **source**.
- Using the “folder” icon, create a new folder called **assignment3** in the same project **MATH2794W YourName** (where you’ve kept all the files from your past assignments).
Create a new file called **intro3.tex** in this folder and set it as your main file.
- Create a new blank **.bib** file in this folder. You can call it **Bib.bib** or something else.
- Your goal is to replicate a paper egunawan.github.io/math2794w/hw/03/sample03.pdf which discusses an example which you might or might not have seen in Calculus 2.
You will be replicating the entire paper except for the name, date, and abstract.
- Helpful resources: You can copy and paste the materials from [LaTeX Practice Assignment 2](#) as a template: [intro2.tex](#), [Bib.bib](#), and [fig1.pdf](#).

You will follow a demo on BibTeX, MathSciNet, etc soon after the start of class. When you are done with the above setup, please stop typing and look up.

You will need to add BibTeX entries to your **.bib** file for all references cited by the sample paper.

1 Creating BibTeX entries

Manually typing a BibTeX entry

- a. We will create a BibTeX entry for the Calculus book by Stewart. Open a search engine and search for “how to cite Stewart Single Variable Calculus Early Transcendentals 8th edition.” You can try some of the links that show up, for example, the link of the publisher, CENGAGE LEARNING. It would tell you the title, the edition (8th), and the author (Stewart, James), and the published year (2016).
- b. With the **Bib.bib** file from LaTeX Practice Assignment 2 as a guide, create an book entry for Stewart. The name of the entry could be **Ste16**, **Stewart**, **Calculus** or another name you prefer. For consistency, you should pick a convention and stick to it. For example, my convention is to write the first three letters of the author’s first surname (if the reference is a single-author publication) or the last-name initials of the authors (if there are two or more authors) followed the last two digits of the year of publication.
- c. To check that this works, please go to your **intro3.tex** file and type `\cite{Ste16}` (if you named your BibTeX entry **Ste16**). Recompile and make sure no error appears.
- d. Typing

`\cite[Section 11.10, Exercise 84]{Ste16}`

would produce [Ste16, Section 11.10, Exercise 84] in your PDF file.

Using MathSciNet, Google Scholar, etc to generate a BibTeX entry

- a. Go to UConn Library Math and Stat Subject Guide: <https://guides.lib.uconn.edu/math>. You can use this resource to find books and articles for your big paper.
- b. On page, find the list of “Key Databases” and click on [MathSciNet](#), which you have access to with your UConn NetID.
- c. As an example, we will use mathSciNet to generate an entry for the Calculus book written by Spivak.
 - On the author’s field, type “Spivak” or “Spivak, M.” and on the title’s field, type “Calculus” or the full title of the book.
 - Once you are sure you’ve found the correct publication, click on it to see a short review of this publication.
 - On the drop-down menu, select “BibTeX.” This should take you to a page containing a BibTeX entry of the book in question: <https://mathscinet.ams.org/mathscinet/search/publications.html?fmt=bibtex&pg1=MR&sl=209411>.
 - Copy this entry and paste it to your .bib file. Replace the name of the entry from MR0209411 to another name that you can easily remember, following your convention, for example, `Spi65`.
- d. Check that you didn’t have a typo by citing this reference in `intro3.tex`.

Creating a BibTeX entry for an online article

Follow the example from last week’s exercise to cite the wikipedia article that you need.

2 Typesetting the sample paper

- a. Change the author’s name to your name and the date to the due date.
- b. Copy the paper “[sample03.pdf](#)”
- c. To monitor each change you make, click “Recompile” and view the PDF in “Full Screen” mode. When you are done, the PDF output that gets created should closely match the PDF file.
- d. Minor differences such as sentence placements and the location of the table are fine. In addition, if you notice what you believe to be a typographic or math error, you may go ahead and fix it. You also have the freedom to add extra sentences that you think would improve the clarify of the paper.

3 Writing the abstract

After you finish reading the paper, replace the abstract with your own abstract (2-4 sentences) which concisely summarize the paper.