

# MATH 161—WRITING ASSIGNMENT 05

Due: Sunday October 07—5:00PM

## Getting Started

1. Get the template for this assignment. Here's how to do it:

- Go to <https://v2.overleaf.com/> (formerly: <https://www.sharelatex.com>), and **make sure you are logged in**.
- In a new window, go here:

<https://v2.overleaf.com/read/rmvdvpjdfdsz>

- Click on the menu icon in the upper-left and select “Copy Project”
- When ask for a name, choose something like “Math 161 - WA 05” and click “Copy”
- When this completes you will be back in your own workspace (instead of mine).
- After solving the problem(s), type them up using the template.
- Email me your final draft.

2. Let me know if you have any questions!

1. Let  $\mathcal{L}$  be any language, and let  $\phi$  and  $\psi$  be any  $\mathcal{L}$ -formulas. Prove that if  $\models (\phi \rightarrow \psi)$ , then  $\phi \models \psi$ .

*Note: this is Problem 1.9.1 #4 part (a). Please prove this carefully using variable assignment functions.*

*You will see in the template that I got you started, but please feel free to write it up differently.*