

# MATH 108—WRITING ASSIGNMENT 02

Due: Thursday February 2

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- Read the [Learning L<sup>A</sup>T<sub>E</sub>X](#) document here:

<https://www.sharelatex.com/project/588ec497176beb641c2a79b9>

The document has 3 pages, but there is lots of empty space. Please read everything—it's important!

- Get the template I made for this assignment. (I even started one of the proofs for you.) Here's how to do it:
  - **Team Member 1:** Go to <https://www.sharelatex.com>, and make sure you are logged in.
  - **Team Member 1:** In a new window, go here:

<https://www.sharelatex.com/project/588ecb0d176beb641c2a7a50>

- **Team Member 1:** Click on the menu icon (upper-left corner - 3 horizontal lines); select “Copy Project”
- **Team Member 1:** When prompted for a name, choose something like “Math 108 - Assignment 02” and click “Copy”
- **Team Member 1:** When this completes you will be back in your own workspace (instead of mine).
- **Team Member 1:** Click on the share icon (upper-right - 5 headed beast). Enter your team member's email address, make sure they “can edit” it, and “Share.”
- **Team Member 1 and 2:** After solving the problems (possibly by yourself), work together to make a beautiful write up.

The problems are below. Please <b>print</b> out your final draft to turn in to me in class this time.
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1. Prove that the forms  $P \implies (Q \vee R)$  and  $(P \wedge \sim R) \implies Q$  are logically equivalent.
2. Determine if implication is associative. That is, **prove or disprove** the following:  
“the forms  $(P \implies Q) \implies R$  and  $P \implies (Q \implies R)$  are logically equivalent.”