

- For this task, you will write a proof in Rocq.
- You should do your work in a Rocq editor. You should not, for example, do scratch work on paper.
- While the task is completable without additional imports, you may add imports, such as tactic libraries you typically use.
- You may consult outside resources for general Rocq questions, such as about syntax or particular tactics, but not for questions about the task domain specifically.