

- 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.
  - Please turn off Copilot and similar AI code generation tools. As with other resources, you may use AI tools to ask general Rocq questions, but not for questions about the task domain specifically.