

The Practice of Mathematics: Homework #1

due 2021 AUG 28, 9:50 a.m.

1 Assignments

The proof of Corollary 1.117 in the notes on complex analysis contains a glitch. What is it?

Use geometric arguments to prove Corollary 1.117. In particular, you can use neither the Schwarz lemma nor anything not stated in the notes before Corollary 1.117.

You may develop some lemmas as stepping stones so long as these lemmas are of a *geometric* nature.

2 Extra credits

This is an assignment of extra credit. An additional 3 points will be added to your final score of this class if you get all answers right. Partially correct answers will get no credits.

Note: You have to typeset your solutions in \LaTeX , and upload your latex source (.tex) and supporting files in a single zip file (**format:** YourName_Homework1.zip) to the course email `sxsj2021@126.com`.