

1. READING

Read Schwartz Chapter 19.

2. TO DO

- (1) Read Schwartz Section 17.3 and summarize the proof of (his version of) the Gauss-Bonnet theorem.
- (2) Spend some time looking through the rest of Schwartz Chapter 17, to see if there might be something you'd like to explore more in your final project for the course.
- (3) Do Exercise 4 (pg 243). Remember that in this context $p/q \sim a/b$ means that p/q and a/b are *Farey related*.
- (4) Do Exercise 5 (pg 243).
- (5) Do Exercise 6 (pg 245)
- (6) Think about Exercises 7 and 8, but you don't have to do them. If do, I'll give you extra-credit. These exercises show that $PSL(2, \mathbb{Z})$ is isomorphic as a group to the free product of $\mathbb{Z}/2\mathbb{Z}$ and $\mathbb{Z}/3\mathbb{Z}$. You don't have to understand what that means, though.
- (7) Read Bonahon Chapter 8 and tell me something you learned and something you'd like to understand better.