

MA 314 Homework 10: Try a triangle!

1. READING

Read the following sections on hyperbolic geometry:

- Schwartz: Sections 11.1 and 11.2
- Read the blog essay [Random Turtles in the Hyperbolic Plane](#) by Danny Calegari.

2. BLOG RESPONSE # 3

- (1) Share some of the interesting things you learned from the essay.
- (2) What questions does the essay provoke? What would you be interested in pursuing further?
- (3) Who is the intended audience of the essay? What qualities of the writing make the author successful or unsuccessful at reaching that audience.
- (4) Choose two other possible audiences for a blog post on the same topic as the essay you read. Say what those audiences are and, for each, how the essay might be structured differently in tone and content if it were written for that audience.

3. BRICKS

Some of these problems require you to use results from your reading that we haven't talked about in class.

- (1) Do Exercise 3 on page 135 of Schwartz.
- (2) Exercise 2.13 on page 42 of Bonahon.
- (3) Exercise 2.14 part d on page 42 of Bonahon. (You'll need to use the previous parts which you aren't asked to prove. If you do them you'll get extra-credit!)

(The problems from Bonahon are a significant result in hyperbolic geometry. In class, we'll discuss the significance. Remember that you can use a computer to compute integrals.)