

Some notes from class

2018-04-06

- 17 (Area) To every polygonal region, there corresponds a unique positive number called the *area* of the region.
- 18 (Congruence versus Area) If two triangles are congruent, then the triangular regions have the same area.
- 19 (Additivity of Area) Suppose that the region R is the union of two regions R_1 and R_2 . Suppose also that R_1 and R_2 intersect at most in a finite number of segments and points. Then the area of R is the sum of the areas of R_1 and R_2 .
- 20 (Area of Rectangle) The area of a rectangle is equal to the product of the length of its base and the length of its altitude.

Definition of area in book

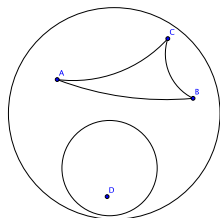
Definition

The *area* $A(P)$ for a simple polygon P in the hyperbolic plane is directly proportional to the polygon's defect. Thus

$$A(P) = k * d(P),$$

where k is a fixed positive real number.

Note: There are a couple issues here that we'll ignore (and a couple that we won't ignore).



“Units” and “non-polygons”

