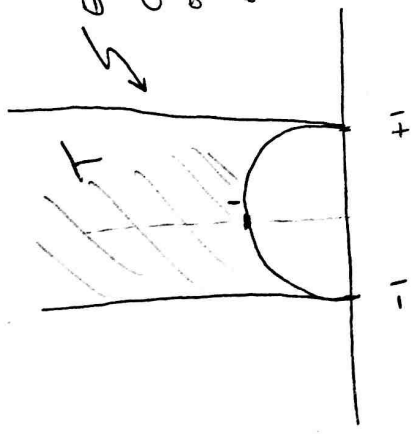
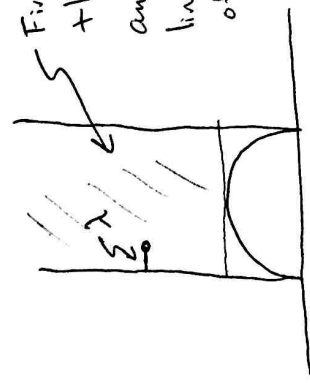


Every ideal triangle can be sent to this one by an isometry of \mathbb{H}^2

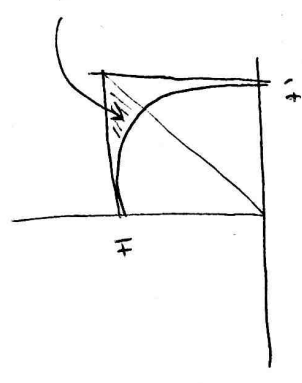


First consider pts in this region and show that horizontal lines joining them to T of bounded length



Points (x, y) in this region can be joined to the half circle by vertical lines of length

$$\ln \left| \frac{y}{\sqrt{1-x^2}} \right|$$



points in this region can be joined to the half circle by line segments perp to the half circle and of bounded length.

