

**Reading:**

- Section 7.5

**Written Assignment:**

- Let  $\alpha: I \rightarrow H$  be a unit-speed curve in the right half-plane, written as  $\alpha(t) = (a(t), b(t))$ . Let  $S = S_C$  be the corresponding surface of revolution, and let  $X: I \times \mathbb{R}$  be the map  $X(t, \theta) = (a(t) \cos \theta, a(t) \sin \theta, b(t))$ , which restricts to a parametrization on suitable open subsets. Compute all of the Christoffel symbols with respect to  $X$ .
- Exercise (13) (page 240).
- Exercise (14) (page 240).