## I. Reading:

- Reread do Carmo, Section 3-2 (pages 134-151).
- Read do Carmo, Section 3-3 (pages 153-159 only).


## II. Required problems:

1. do Carmo, Section 3-2 (pages 151-153), \#1. Interpret the problem statement as follows: Let $p \in S$ be a hyperbolic point, and let $C$ be the set of unit vectors in $T_{p} S$. If $A$ is an arc of $C$ whose endpoints lie on principal directions and that has no other intersections with the principal directions, show that $A$ intersects exactly one asymptotic direction, and that intersection occurs in the interior of $A$.
2. do Carmo, Section 3-2 (pages 151-153), \#2.
3. do Carmo, Section 3-2 (pages 151-153), \#3.
4. do Carmo, Section 3-2 (pages 151-153), \#4.
5. do Carmo, Section 3-2 (pages 151-153), \#5.
6. do Carmo, Section 3-2 (pages 151-153), \#6.
7. do Carmo, Section 3-2 (pages 151-153), \#7.
8. do Carmo, Section 3-2 (pages 151-153), \#8.
