

**Assignment 15**

*Due on Monday, February 15, 2010*

Notation: [dC] = do Carmo, *Riemannian Geometry*

- (1) Prove that a globally Riemannian symmetric space is a complete and homogeneous Riemannian manifold.
- (2) [dC] page 186 Exercise 9.
- (3) [dC] page 187 Exercise 10.
- (4) [dC] page 188-189, Exercise 12 (b).