

Math 7210: Riemannian Geometry – Homework 8

Due in class: Wednesday, March 15, 2017

1. Exercise #5.1 of do Carmo's *Riemannian Geometry*.
2. Exercise #5.3 of do Carmo's *Riemannian Geometry*.
3. Exercise #5.5 of do Carmo's *Riemannian Geometry*.
4. Exercise #5.8 of do Carmo's *Riemannian Geometry*. (For part (b), the point is to give a new proof of this fact using (a) instead of the argument from Exercise 3.6.)