DIFFERENTIAL GEOMETRY HOMEWORK 2

DUE MONDAY JANUARY 28, 2019

1. The Assignment

You should read our texts. We are talking about the material in *Shifrin* Chapter 1 section 1. Corresponding material is in *do Carmo* Chapter 1, section 1-3.

You should also do exercises. Here are some suggestions. I will always suggest more exercises than I expect you to do. That way, you won't run out. If you didn't buy do Carmo's book, don't worry about those. But I want to help you see relevant material in that book, too, so I'm going to put it on the list.

- From Shifrin, do Exercises, section $\S1.1 \#2-13$ (on pages 8-10)
- From do Carmo, do Exercises, section §1-3 #1-10 (on pages 7-12)
- Try the exercises below.

Yes, I left out Shifrin Exercise 1.1.14. That is because I have not been able to completely solve it. I'll turn that one into a project for 20 points.