

DIFFERENTIAL GEOMETRY

HOMEWORK 7

DUE MONDAY, MARCH 11, 2019

THE ASSIGNMENT

We have changed focus to study the differential geometry of surfaces, so far, we have talked about the basics, up to a definition of the first fundamental form. This material is talked about in Chapter 2 section 1 of Shifrin, and Chapter 2 of do Carmo. There is deeper foundational material in do Carmo, so I think you should treat this as optional reading.

For a “Best Two” task this week, I will accept:

- From Shifrin, from §2.1 Exercises 1 through 13. Exercises 3 and 4 have many parts, I will accept any two parts of those as a “full exercise.”
- From do Carmo, any exercise from chapter 2.