

Math 442
Winter 2019
Homework 6

Read Sections 2-5 and 2-6 in do Carmo. Then do the following exercises from do Carmo.

2-5: 3, 11 (parametrize C by arc length), 14 (you may use the results in exercise 28 of 2-4; see also the definition of critical point in exercise 13 of 2-4)

2-6: 1 (assume that V_1 and V_2 are connected), 2, 4 (just prove that a regular, connected, orientable surface can have only two distinct orientations using the definition of orientation as a differentiable field of unit normal vectors).

This assignment is due Friday, March 15