

# Math 109C Set 7

due May 25

Do the following problems from Guillemin and Pollack:

§3.2

12,

§3.3

2,

4, (see page 110)

10,

13, (one approach: for complementary dimensional compact closed submanifolds  $X_i, Z_i \subseteq Y_i$ , show that  $I(X_0 \times X_1, Z_0 \times Z_1) = (-1)^{\dim X_1 \cdot \dim Z_0} I(X_0, Z_0) \cdot I(X_1, Z_1)$ )

§3.4

4,

8. (give a different argument from problem 13 of §3.3)