

Remark: As I mentioned in class, do Carmo consistently fails to distinguish between what I call the *tangent plane* and the *affine tangent plane*. So in each of the problems below, part of your job is to decide which of these concepts do Carmo means when he says “tangent plane.” Be sure to indicate which interpretation you’re choosing.

I. Reading:

- Read do Carmo, Section 2-4 (pages 83–88).

II. Practice problems:

1. do Carmo, Section 2-4 (pp. 88–92), #1, 2, 3, 11.

III. Required problems:

1. do Carmo, Section 2-4 (pp. 88–92), #5.
2. do Carmo, Section 2-4 (pp. 88–92), #7.
3. do Carmo, Section 2-4 (pp. 88–92), #8.
4. do Carmo, Section 2-4 (pp. 88–92), #13.
5. do Carmo, Section 2-4 (pp. 88–92), #18.
6. do Carmo, Section 2-4 (pp. 88–92), #21.
7. do Carmo, Section 2-4 (pp. 88–92), #26.