Due March 24

Read Apostol II, Theorem 8.12 (statement)

1. Compute the partial derivatives in term as directional derivatives of the total derivative.


4. Shurman 4.3.2, 4.3.3

5. Shurman 4.4.1, 4.4.2

EXTRA CREDIT

1. Assume that $f : \mathbb{R}^n \to \mathbb{R}^m$ is differentiable at a point $a$. Show that the total derivative at $a$ is the Jacobian matrix at $a$. 