## Math 18 fall 2010

## Homework Set #5

## due Thursday October 7, 2010 at noon

**Topics covered:** differentiability, differentials, local linear approximation, chain rule, directional derivatives, gradient

Suggested reading<sup>1</sup>: Sections 13.4-6

## **Problems:**

Sections	13.4	13.5	13.6
Problem no.	10,23,29,38,59,63	$9,\!17,\!28,\!38,\!47,\!55,\!56$	$14,\!22,\!35,\!44,\!51,\!61,\!64,\!81$

<sup>&</sup>lt;sup>1</sup>All problems and readings are from H.Anton, I.Bivens and S.Davis, Calculus Multivariable, 9 edition