

LECTURE SUMMARY 5.1

WEDNESDAY, JUN 1, 2016

FUNCTIONS OF SEVERAL VARIABLES

1. Examples.
2. Graphs.
3. Wolfram Alpha plot.

PARTIAL DERIVATIVES AND HIGHER ORDER PARTIAL DERIVATIVES

1. Examples.
2. Key: Regard all the other variables as constant when taking derivatives with respect to one variable.
3. The numbers of first order derivatives, second order derivatives.

MAXIMUM-MINIMUM PROBLEM

1. relative maximum and minimum.
2. Critical point, saddle point.
3. D-test.
4. Examples.