

Math 118 – Week 6 Assignments
Fall Term 2002

Monday September 30 *Class 12:*

We will discuss more general functions (those of several variables) and how to take their derivatives (partial derivatives).

Reading:

CiC, p. 147-151

Homework #9: (6 points)

CiC, p. 152, #1 a,b,c,d,e,g

DUE in Class 13

Wednesday October 2 *Class 13:*

With the notion of partial derivatives we will construct the full microscope equation and discuss finding maxima and minima for functions of two variables.

Reading:

CiC, p. 453-467, 501-514

Homework: #10 (4 points)

CiC, p. 471, #11, #12 (You do not need a computer to do these exercises.)

CiC, p. 153, #3, #7

Due in Class 14

Thursday October 3 Lab #4:

Since functions of two variables are challenging to draw, we will get the computer to construct contour plots so that we can visualize surfaces determined by a functions of two variables, $z = f(x, y)$.

Friday October 4 *Class 14:*

We will conclude our multivariable section by learning how to determine whether a critical point is a local max, local min or saddle point.

Reading:

CiC, p. 515-526

Homework:

Quiz # 4: Multivariable functions

DUE in Class 15