

Structure/Pace of the class

- Fall : 52 class days
- 3 exams
- 3 quizzes
- 8 review days
- 3 matlab days.

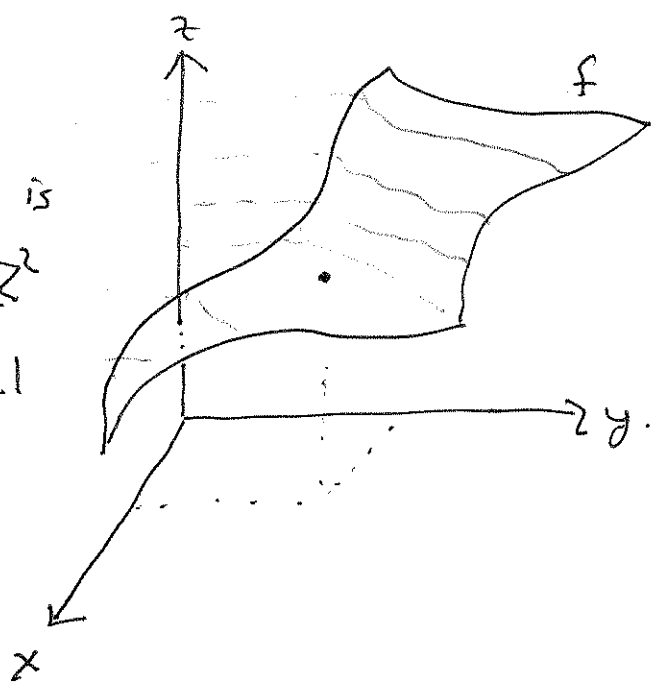
35 lecture days for 23 sections.

collect response cards.

contour plots

A continuous function $f(x, y) \mapsto z$ where $x, y, z \in \mathbb{R}$ can be represented as a surface in \mathbb{R}^3 .

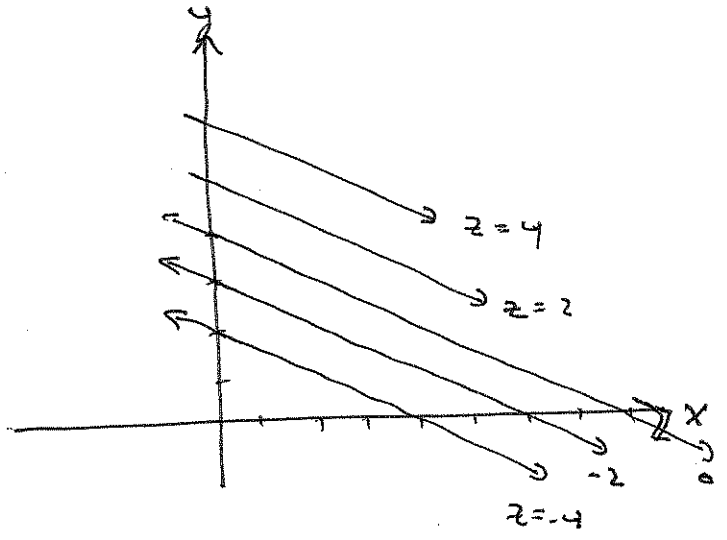
a contour plot is a picture in \mathbb{R}^2 showing the level curves.



ex1: construct a contour plot of $g(x,y) = x + 2y - 8$

- (i) fix z @ equally spaced intervals.
- (ii) plot the level curves & label w/ z vals.

z	level curve
-4	$4 = x + 2y$
-2	$6 = x + 2y$
0	
2	
4	



ex2: Dali's Target (Mathematica).

ex3: Sketch a contour map of $h(x,y) = \sqrt{36 - 9x^2 - 4y^2}$

z	
< 0	Not possible
0	
1	
2	
\vdots	
6	
> 6	Not possible