

## Grading Midterms

Samir Canning, Daniël Kroes, Eric Lybrand, Jeff Rabin, Jacqueline Warren



UC San Diego

## Announcements

- ▶ Observation comments will be posted on Gradescope as they come. **HOMEWORK:** View your observation feedback as it becomes available.
- ▶ Go ahead and start thinking about review sessions or extra office hours before midterms. Coordinate with your co-TAs on this.
- ▶ You will be counted absent if you're  $\geq 10$  minutes late going forward.
- ▶ Please put away laptops during this class. This is not the appropriate time for online pants shopping.

# Overview

Proctoring

Grading

Guidelines

Example Problems

## The DL on Proctoring

- ▶ You are expected to help proctor unless otherwise stated.
- ▶ Contact your instructor to clarify expectations, e.g. cheat sheets or calculators allowed or not, what questions you can and cannot answer during the exam, etc.
- ▶ If you are unable to proctor (due to class, say), **you** are responsible for finding a replacement.
- ▶ Show up 10 minutes early to pass out exams. Stay to collect exams at the end.
- ▶ Talk to your instructor about the proctor pool if you need more proctors. Email [proctorpool@ucsd.edu](mailto:proctorpool@ucsd.edu)

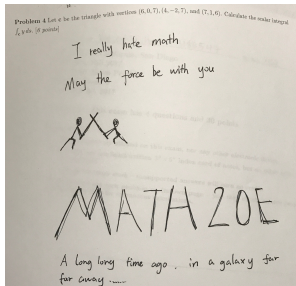
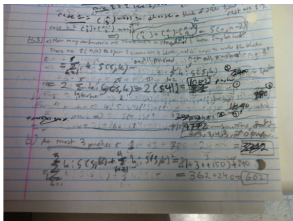
## What To Do If You Suspect Cheating

- ▶ **DO NOT TAKE THEIR EXAM AWAY.**
- ▶ Inform the instructor. Do not make a scene.
- ▶ If necessary, move them discreetly.
- ▶ If they are using unauthorized material (e.g. cell phone, cheat sheet), have instructor confiscate them.
- ▶ Record student's name, and mark nearby exams as well.
- ▶ All proctors involved should write a statement while memory is fresh.

# Grading: An Appetizer



Since the algebraic multiplicity of the eigenvalue  $\lambda$  corresponds to  $\lambda$  is zero, then there must also exist an eigenvector of  $A$  with the value of  $\lambda$  since the geometric multiplicity  $\geq$  algebraic multiplicity of the eigenvalue and since the eigenvalue's algebraic multiplicity is 1, then the geometric multiplicity is 1 or zero, but having zero geometric multiplicity would mean that there is no eigenvector to form a basis of  $\mathbb{R}^n$  and thus be diagonalizable.



# The Rulebook

- ▶ Create rubric guidelines before you grade by looking at some exams.
  - ▶ (Non-Gradescope users only) Do not show your rubric to students. They'll use it as a bargaining tool. You can explain in words what you were looking for though.
- ▶ Leave constructive comments on exams. g
- ▶ Don't be afraid to be firm with students. Gently point out all mistakes.
- ▶ Grade consistently. One TA should grade all of one problem. Co-ordinate exam grading with your co-TAs.
- ▶ Take grading seriously. Exam scores mean **a lot** to students.

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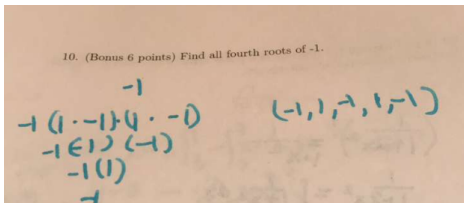
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- ▶ Did they write a lot of stuff?
  - ▶ Only focus on what is relevant and correct.
- ▶ Does it look like they tried hard?
- ▶ Did this student historically perform well/poorly?

# What Deserves No Credit?

- ▶ Few answers deserve 0 points.
- ▶ Remember, 0 points is equivalent to the student writing down **nothing relevant and correct**.



5. (7 points) Let  $U$  and  $V$  be sets. Define  $h : \mathcal{P}(U) \times \mathcal{P}(V) \rightarrow \mathcal{P}(U \cup V)$  by  $h(C, D) = C \cup D$ .

✓ (a) (2 pts) List all of the elements of the set  $\{(C, D) \in \mathcal{P}(U) \times \mathcal{P}(V) \mid h(C, D) = \emptyset\}$ .

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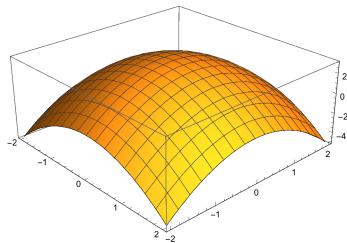
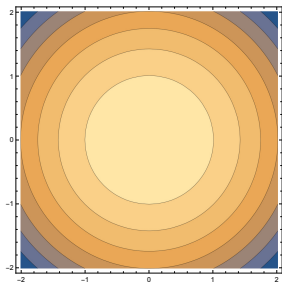
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(a) If  $h(C, D) = \emptyset$  then since  $h(C, D) = C \cup D$  is defined, elements are s.t.  $C \subseteq U$  and  $D \subseteq V$  s.t.  $(C \cup D)^c \Rightarrow C^c \cap D^c$  (by de Morgan law),  $\emptyset$

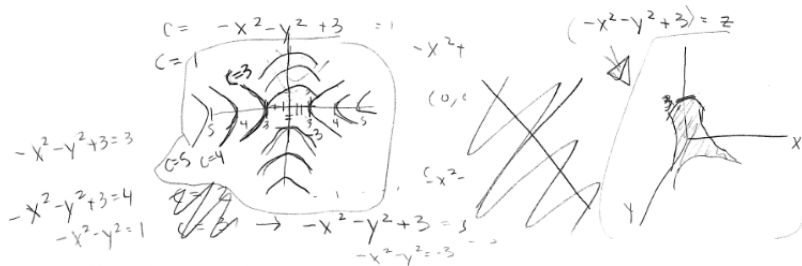
## Example Problem

Let  $f(x, y) = 3 - x^2 - y^2$ .

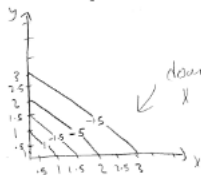
1. (5pts) Draw a contour diagram for  $f$  which is clearly labeled. Include at least three different contours.
2. (5pts) Sketch the graph of  $f$ .



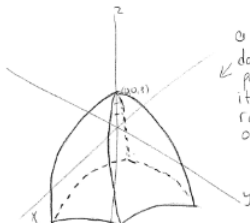
## Student Response 1



## Student Response 2

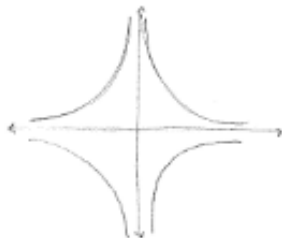
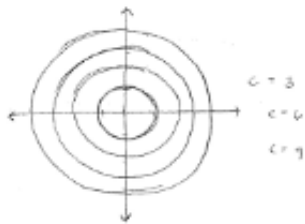


downward sloping because  
of  $-1$   
x has a negative slope



a regular  
downward sloping  
paraboloid except  
it has been  
raised 3 units  
on the z axis

## Student Response 3



# Stay Strong...

