2024 Fall Math 140 Week-In-Review

Week 4: Post Exam 1

Ok, I just took Exam 1 and now what?

After completing an exam, ...

- it is important to rest → exams can be exhausting
- be careful not to take it easy (we have videos to watch for this next week)

find the balance

- ask (nicely) your prof. when they expect grades posted
- when grades get posted, access your exam to review it (ie. Gradescope, ...)

After reviewing your exam on your own, ...

- compare your results w/ prof's key to see what went wrong & correct it
- if you still have trouble w/ question, then ask to meet w/ your prof (don't wait until late semester)
- if you think something was misgraded (it does happen) then email your prof & ask what the regrade protocol is (be nice please)
- ★ make a plan moving (success does not happen w/o a plan)

So, how did the exam go?

I ... performed horribly! HELP!

(1) You aren't out of the game! Breathe.
- stress & anxiety are counter productive to success

(2) Keep calm and come up w/ a plan.

(3) You can still do well in this class, but it is going to take some work

(4) Review your exam w/ your prof.

I ... didn't perform well but I didn't bomb either

See steps 1-4 above

(5) Adjust your study habbits, meet w/ prof. and explain how you prepared then ask for feedback

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I ... performed really well!

★ Be careful and don't get complacent ★

(1) Keep it up: the effort & intensity b/c things get more difficult from here...

How do I move forward from here?

It's all about ... the daily grind (and also for Math 142)

WebAssign	13%
Quiz/Groupwork	15%
Video Quizzes	3%
Iclicker	4%
	35% of total grade (that's a lot)

maximize these, then it takes the pressure off exam grades

What if ... I'm thinking about Q-dropping....?

DON'T: recall that your final exam grade replace your lowest regular exam grade

At least wait til after exam 2, but gotta put in the work

So how do I ... move forward towards success?

1. The Daily Grind
2. Office Hours (Prof & BMTAs)
   (great setting to knock out WebAssign)
3. Use all your resources
   - MLC & VMLC: Week-In-Review, Help Session (M-Th, am & pm)
     (mlc.tamu.edu) Videos (Algebra Video Series)
   - FREE online textbooks (extra practice)

What should I expect next?

Chapter 3: Linear Programming

- setup system (similar to chp. 2)
  - define variables, construct equations, etc...
- work w/ lines (all things lines)
  - slope, both kinds of intercepts, graphing, etc....
- work w/ linear inequalities

  $2x+3y=7 \longrightarrow 2x+3y \geq 7$ (shading on graph)
- setup & solve systems of inequalities using 2 methods:
  1) Method of Corners (a lot graphing, shading, etc...)
  2) Simplex Method (uses matrices similar to RREF)

Chapter 4: Probability

- compute basic probability
- work w/ Venn Diagrams
- probability distributions (table showing probabilities)
- compute expected value w/ word problems

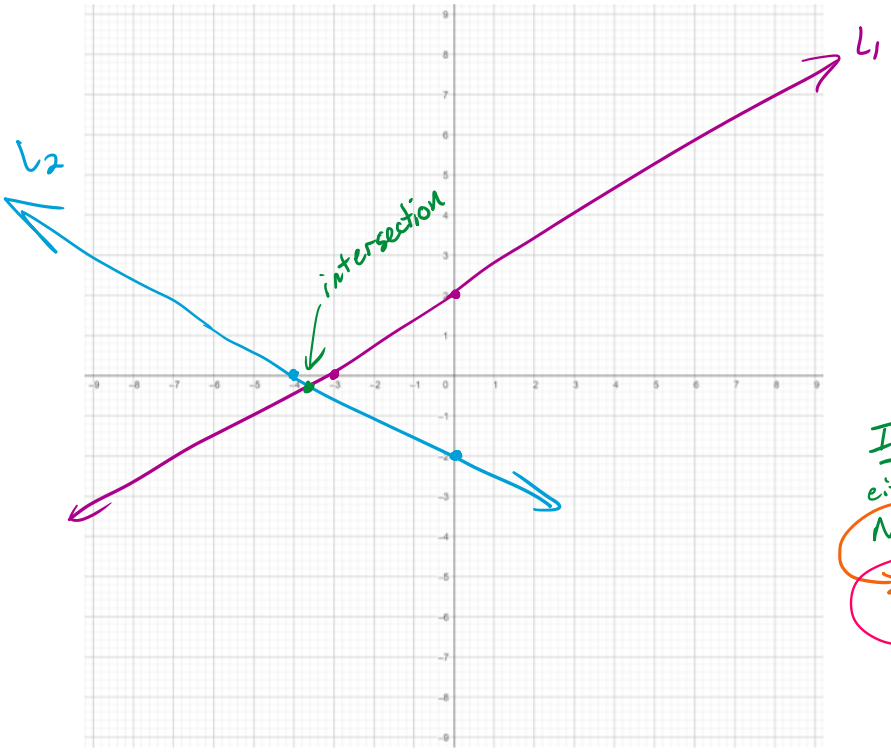
Here are some important skills we need to retain from chapters 1 and 2:

Graphing lines and determining an intersection point.

Example: For the given pair of lines, graph each one on the grid provided and determine their intersection point without using the graph. Express all values in exact form.

L_1: $6 + 2x = 3y$

L_2: $x + 2y + 4 = 0$



Line 1: $x=0 \rightarrow 6=3y$, $(0,2)$, $2=y$

$y=0 \rightarrow 6+2x=0$, $(-3,0)$, $2x=-6$, $x=-3$

Line 2: $x=0 \rightarrow 2y+4=0$, $(0,-2)$, $2y=-4$, $y=-2$

$y=0 \rightarrow x+4=0$, $x=-4$, $(-4,0)$

Intersection: we can do this w/ either Substitution Method, Addition Method, or RREF w/ matrices

→ if one of lines is just $x=\#$ or $y=\#$

→ if both have x & y

L_1: $2x-3y=-6$

L_2: $x+2y=-4$

$$\rightarrow \left[\begin{array}{cc|c} 2 & -3 & -6 \\ 1 & 2 & -4 \end{array}\right]$$

$$\left[\begin{array}{cc|c} 1 & 0 & -24/7 \\ 0 & 1 & -2/7 \end{array}\right] \leftarrow$$

Intersection $\left(-\frac{24}{7}, -\frac{2}{7}\right)$

Skills used:

- Quickly be able to graph a line (found intercepts)
- Find an intersection between lines
- be able to do algebra