Math 126 End of Week 1 Newsletter

Every week I will write/organize a newsletter. These newsletters will contain a summary of the calendar, information about homework, links to review material and studying advice. The studying advice will include old exam problems to look at each week.

UPCOMING ASSIGNMENTS
- *Closing Tues (Jan. 12th)*: 12.1, 12.2, 12.3 on **Webassign** (https://www.webassign.net/washington/login.html)
- *Closing Thur (Jan. 14th)*: 12.4(part 1), 12.4(p2), 12.5 (p1) on **Webassign**.
- *Opens Fri (Jan 15th):* **Canvas Quiz 1 on chapter 12** (https://canvas.uw.edu/courses/1432364/quizzes)
  Closes Sunday night, you get 4 hours from when you start, just make sure you start early enough to be done by 11:59pm on Sunday. Several problems will be similar/identical to test preps.

UPCOMING SCHEDULE: (usually this will be brief, but I explain "worksheets" and "practice exam" below)

Monday: 12.5 Live-Stream (lines and planes)   - **Watch thru 12.5 (part 1,2) videos before**
Tuesday: Test Prep & HW Q&A (test prep will have 12.4, 12.5 and 12.6 problems, you don't do them all during quiz section, but you can use this as a practice sheet through week 2 and as you get ready for exam 1)
Wednesday: 12.5/6 Live-Stream (more lines and planes)   - **Watch 12.5 (parts 3,4) videos before**
Thursday: Practice Exam on *Gradescope* in Quiz Section
               This only graded on participation. It will be a like a regular exam. I want you to work on it for 25-30 minutes and try uploading one page of work. Then discuss a few problems with your TA. The main goal is to see what an exam is like.
Friday: 12.6/13.1 Live-Stream (3D shape names and intro do curves) - **Watch 12.6 (1,2) and 13.1 videos before**

EXTRA POSTINGS: There are several postings on the course materials website (there materials are not "required", just supplemental resources that I've created over the years and I hope may help some of you, if you struggled with a specific topic or section maybe my review sheet for that section will help):

1. My section specific review/summary sheets on general 3D and vector facts:

   12.1 Review, 12.2, Review, 12.3 Review, 12.4 Review, Brief Review of 12.1-12.4 3D and vector facts

2. 12.5 – Lines and Planes Review Sheets:

   Visual Description of Lines and Plane (good to make sure you understand these pictures well).
   12.5 summary (with examples of intersections of lines and intersections of planes)
   Dr. Loveless Flowchart on finding lines/planes
   Many, many practice problems and solutions on finding lines/planes (a lecture video goes through this)

3. 12.6 – 3D shape names (cylinders and quadric surfaces, and the idea of traces)

   12.6 summary and examples (a lecture video goes through this)

OLD EXAMS and TEST PREP: *It is vital that you spend some time at the end of each week reviewing the previous homework and practicing your homework stills on old exam problems*.   To help with this, I typically provide a list of old problems by topic, which I will still do. In addition, this quarter, I am provided "Test Preps" during quiz section which provide similar content. I hope you are finding those sessions helpful and I hope you use those test preps and solutions for further review (likely many of those problems are similar or the same as those below):

The test preps and solutions can be found on the canvas page.

See the next page for my list of random targeting practice problems by section….

More about old exams…

My exam archive: https://sites.math.washington.edu/~aloveles/Math126Fall2020/examarchive.html
The departmental exam archive here: https://sites.math.washington.edu/~m126/midterms/midterm1.php

Your primary resource for old exams should be my exam archive. If you have gone through all homework and all my old exams, then check out exams in the department archive.
Here is some targeted practice problems from old exams by section (again, also see the test preps for more)

For practice with 12.1 and 12.2 material you might try:
Problem 1a from: https://sites.math.washington.edu/~aloveles/Math126Spring2017/f13m126e1v1.pdf
Problem 1a from: http://www.math.washington.edu/~m126/midterms/midterm1/m126spr12taggartExI.pdf
Problem 1ab from: http://www.math.washington.edu/~m126/midterms/midterm1/m126aut12bekyelExI.pdf

For practice with 12.3 and 12.4 material you might try:
Problem 2a from: https://sites.math.washington.edu/~aloveles/Math126Spring2017/sp14m126e1.pdf
Problem 1bc from: http://www.math.washington.edu/~m126/midterms/midterm1/m126spr10lovelessExI.pdf

For practice with 12.5 (Lines and Planes) you might try:
Problem 2 from: http://www.math.washington.edu/~m126/midterms/midterm1/m126aut13lovelessExI.pdf
Problem 1 from: http://www.math.washington.edu/~m126/midterms/midterm1/m126spr13lovelessExI.pdf
Problem 3 from: http://www.math.washington.edu/~m126/midterms/midterm1/m126spr14taggartExI.pdf
Problem 2 from: http://www.math.washington.edu/~m126/midterms/midterm1/m126win14bekyelExI.pdf

For practice with 12.6 (intro to surfaces) material you might try:
Problem 2 from: http://www.math.washington.edu/~m126/midterms/midterm1/m126spr11lovelessExI.pdf
Problem 3 from: http://www.math.washington.edu/~m126/midterms/midterm1/m126spr14novikExI.pdf

ADVICE AND GETTING HELP:
-   If you want to get a high grade in this course, then start by reading my recipe for success
    The key is to treat every homework question like an exam problem!
-   If you get stuck on homework or in studying for exams and you need help, then first start by reading this:
    How to Get Help.

SUPPLEMENTAL POSTINGS (a few additional postings that students have told me have been helpful)
1. *Unit circle and trig facts*: Print this off and keep it handy.
2. *Calculus Fact Sheet*: These are the derivatives and integrals you can quote, all others you must show work.
3. *Optional Physics and Vectors Supplement*: Not required, just some notes I made about how vectors might pop up in your science courses.

Remember the key is to watch the lecture videos and start homework early, then you can use this additional material if you need it.

I hope some of this helps. Let me (and your classmates) know if you find something particular helpful here (perhaps you can post it on the discussion board telling classmates if they need help to check out one of my particular review sheets, etc.).

- Dr. Andy Loveless