

## Math 126 End of Week 3 Newsletter

### UPCOMING SCHEDULE:

Friday: Section 10.3 (Polar)  
Monday: Section 13.2, 13.3 (Tangents, Arc Length, Curvature in 3D)  
Tuesday: Review and HW Q & A (Bring lots of HW questions!)  
Wednesday: Review  
Thursday: Exam 1  
Next Friday: Section 13.3 (More measuring 3D Motion, TNB Frame)

### Exam 1 is Thursday, April 20<sup>th</sup>: It includes 12.1-12.5, 10.1-10.3, 13.1-13.2, 13.3 (part 1)

There will be four pages of questions. You will have **50 minutes**. Time will be a factor, so make sure you time yourself as you are practicing old exams. Many students have trouble adjusting to the shorter time on the first exam (so consider yourself warned).

**WORKSHEET 3** solutions (from Thursday's quiz section) are posted here:

<http://www.math.washington.edu/~aloveles/Math126Winter2016/sp14m126worksheet3solns.pdf>

### HOMEWORK:

Closing Tuesday: 10.2/13.2, 10.3  
Closing Thursday: 13.3 (part 1)

(Complete these well before their closing dates, I strongly encourage you to make good progress on ALL of these assignments this weekend. Don't wait until next week. The 13.3 problems in homework don't really require lecture; you are computing arc length and curvature which you can do now using the formulas from math 125 and the book).

### PREVIOUS HOMEWORK STATS:

12.5(1): median score = 100%, median time browser open to assignment = 59 minutes  
12.5(2): median score = 100%, median time browser open to assignment = 67 minutes  
12.5(3): median score = 98%, median time browser open to assignment = 155 minutes  
12.6: median score = 100%, median time browser open to assignment = 110 minutes

### NEW POSTINGS

Remember the course website is here: <http://www.math.washington.edu/~aloveles/Math126Winter2016/index.html>

There are several new postings:

1. **One Page Reference of Key Formulas you need to understand going into Exam 1:**

<https://sites.math.washington.edu/~aloveles/Math126Spring2017/sp14m126Exam1FactSheet.pdf>

2. **Homework Hints for 10.1/13.1 and 10.2/13.2:**

<https://sites.math.washington.edu/~aloveles/Math126Spring2017/f13m126ParametricHomeworkNotes.pdf>

3. **Summary of 10.3 (Polar) with worked out examples on graphing:**

<https://sites.math.washington.edu/~aloveles/Math126Spring2017/PolarCoordinatesOverview.pdf>

4. **Summary of 13.2 and 13.3 (part 1) with worked out examples that are just like homework:**

[https://sites.math.washington.edu/~aloveles/Math126Spring2017/13-2And13-3OverheadSummary%20\(Landscape\).pdf](https://sites.math.washington.edu/~aloveles/Math126Spring2017/13-2And13-3OverheadSummary%20(Landscape).pdf)

5. **If you have forgotten how to find tangent lines in 2D, then read this practice sheet** that contains worked out examples (this is from my Math 124 course). A couple of these worked out examples are almost identical to homework you are doing in 10.2/13.2 (see problem 3 in this sheet and problem 6 in the homework which is directly from Math 124 HW): <https://sites.math.washington.edu/~aloveles/Math126Spring2017/m124%20Tangent%20Review.pdf>

There are several other postings and supplemental sheets that I posted on my course website. Check them out (the polar graph paper is kind of fun to print out and work with).

## OLD EXAMS:

Remember there are many old exams (most with solutions) in the departmental exam archive here:

<http://www.math.washington.edu/~m126/midterms/midterm1.php>

and in my additional exam archive here:

<https://sites.math.washington.edu/~aloveles/Math126Spring2017/examarchive.html>

For practice with 12.6 (intro to surfaces) material you might try:

Problem 1 from: <https://sites.math.washington.edu/~aloveles/Math126Spring2017/w15m126e1.pdf>

Problem 2 from: <http://www.math.washington.edu/~m126/midterms/midterm1/m126spr11lovelessExl.pdf>

Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm1/m126spr14novikExl.pdf>

Problem 2a from: <http://www.math.washington.edu/~m126/midterms/midterm1/m126spr13lieblichExl.pdf>

Problem 5 from: <http://www.math.washington.edu/~m126/midterms/midterm1/m126aut09solomyakExl.pdf>

Problem 7 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/Taggartf09e1.pdf>

For practice with 10.1 and 10.2 you might try:

Problem 4 from: <https://sites.math.washington.edu/~aloveles/Math126Spring2017/w16m126e1solns.pdf>

Problem 3 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/sp11m126e1.pdf>

Problem 5 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/sp10m126e1.pdf>

Problem 6 from: [http://www.math.washington.edu/~m126/midterms/midterm1/mid1\\_win09\\_perkins.pdf](http://www.math.washington.edu/~m126/midterms/midterm1/mid1_win09_perkins.pdf)

Problem 6 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/Taggartf09e1.pdf>

Problem 4 from: <http://www.math.washington.edu/~m126/midterms/midterm1/m126aut10conroyExl.pdf>

For practice with 13.1, 13.2, and 13.3 you might try:

Problem 4 from: <https://sites.math.washington.edu/~aloveles/Math126Spring2017/f13m126e1v1.pdf>

Problem 5 from: <https://sites.math.washington.edu/~aloveles/Math126Spring2017/w16m126e1solns.pdf>

Problem 5b from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/sp11m126e1.pdf>

Problem 4 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/sp10m126e1.pdf>

Problem 4 from: [http://www.math.washington.edu/~m126/midterms/midterm1/mid1\\_win09\\_perkins.pdf](http://www.math.washington.edu/~m126/midterms/midterm1/mid1_win09_perkins.pdf)

Problem 3 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/Taggartf09e1.pdf>

Problem 5 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/Taggartf09e1.pdf>

For practice with 10.3 you might try:

Problem 3 from: <https://sites.math.washington.edu/~aloveles/Math126Spring2017/w16m126e1solns.pdf>

Problem 4 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/sp11m126e1.pdf>

Problem 3 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/sp10m126e1.pdf>

Problem 1 from: [http://www.math.washington.edu/~m126/midterms/midterm1/mid1\\_win09\\_perkins.pdf](http://www.math.washington.edu/~m126/midterms/midterm1/mid1_win09_perkins.pdf)

Problem 4 from: <http://www.math.washington.edu/~aloveles/Math126Spring2013/Taggartf09e1.pdf>

Problem 5 from: <http://www.math.washington.edu/~m126/midterms/midterm1/m126aut10conroyExl.pdf>

You should look at more old exams than just these, but this hopefully gives you some targeted practice.

I hope some of this helps.

Dr. Andy Loveless