

## Math 126 End of Week 8 Newsletter

### UPCOMING SCHEDULE:

Friday: Section 15.5 (Double integral Applications and More Practice)  
Monday: Review for Exam 2 (Bring Questions!!)  
Tuesday: **Exam 2**  
Wednesday: Taylor Notes 1 and 2 (Taylor Polynomials and Error Bounds)  
Thursday: Taylor Series Worksheet  
Next Friday: Taylor Notes 3 and 4 (Finding Patterns)

### HOMEWORK:

Closing Friday (tonight) at 11pm: 15.4  
Closing Thursday at 11pm: 15.5  
Closing next Tues (March 8) at 11pm: TN 1, TN 2, TN 3

### PREVIOUS HOMEWORK STATS:

15.1: median score = 100%, median time browser open to assignment = 39 minutes  
15.2: median score = 100%, median time browser open to assignment = 142 minutes  
15.3: median score = 100%, median time browser open to assignment = 177 minutes

### NEW POSTINGS

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

1. **Exam 2 Quick Review:** (Ignore reference to 15.5 or center of mass, that won't be on our midterm)  
<http://www.math.washington.edu/~aloveles/Math126Winter2016/sp13m126Exam2QuickReview.pdf>

2. **Exam 2 Conceptual Review:** (Ignore reference to 15.5 or center of mass, that won't be on our midterm)  
<http://www.math.washington.edu/~aloveles/Math126Winter2016/Exam2SpecialComments.pdf>  
(students have told me this conceptual review was most helpful to them).

On the next page, I copied all my targeted review from my previous newsletters. I hope you find this helpful.  
In addition, one of my colleagues posted a compilation of exam 2 problems here:

**OLD EXAMS:** (Here are some targeted practice problems copied from previous week's newsletters)

**13.3 covers:** curvature, arc length, TNB-Frame, Tangent Line, Osculating Plane, Normal Plane.

**13.4 covers:** acceleration, velocity, position, normal and tangential components of acceleration.

#### For practice with 13.3:

Problem 1 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126win10bekyelExII.pdf>  
Problem 1 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126aut10solomyakExII.pdf>  
Problem 2 from: <http://www.math.washington.edu/~m126/finals/m126finalAut2012.pdf>  
Problem 1a from: <http://www.math.washington.edu/~aloveles/Math126Winter2016/sp13m126e2honors.pdf>  
Problem 2 from: <http://www.math.washington.edu/~m126/finals/m126finalAut2013.pdf>

#### For practice with 13.4:

Problem 1 from: <http://www.math.washington.edu/~m126/finals/m126finalAut2013.pdf>  
Problem 1 from: <http://www.math.washington.edu/~m126/finals/m126finalAut2012.pdf>  
Problem 1b from: <http://www.math.washington.edu/~aloveles/Math126Winter2016/sp13m126e2honors.pdf>  
Problem 1a from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>  
Problem 5 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr13perkinsExII.pdf>  
Problem 2 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126aut13taggartExII.pdf>

**14.1, 14.3, 14.4 cover:** domain, level curves, partial derivatives, tangent planes (linear approx./differentials)

**14.7 covers:** critical points, 2nd derivative test (local max/min and saddle points), global max/min

**For practice with 14.1, 14.3, 14.4:**

Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14novikExII.pdf>  
Problem 2 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126win14bekyelExII.pdf>  
Problem 2a from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr13lovelessExII.pdf>  
Problem 2 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14perkinsExII.pdf>  
Problem 2a from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126aut12lovelessExII.pdf>  
Problem 1b from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>  
Problem 2 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr10lovelessExII.pdf>

**For practice with 14.7:**

**Local Max/Min:**

Problem 4 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14novikExII.pdf>  
Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14taggartExII.pdf>  
Problem 2b from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr13lovelessExII.pdf>  
Problem 2 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>

**Global Max/Min:**

Problem 4 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14lovelessExII.pdf>  
Problem 5 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14perkinsExII.pdf>  
Problem 4a from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>

**Applied Max/Min:**

Problem 4 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126win14bekyelExII.pdf>  
Problem 4 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126aut12lovelessExII.pdf>  
Problem 5 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr10lovelessExII.pdf>

**15.1, 15.2 cover:** definition of double integral, basic calculation and rectangular regions.

**15.3 covers:** double integrals over general regions (top/bot or left/right), reversing order

**15.4 covers:** double integrals over polar regions, area of polar regions

**For practice with 15.1 and 15.2:**

Problem 1(a) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14perkinsExII.pdf>  
Problem 3(a) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>

**For practice with 15.3:**

Problem 2 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14lovelessExII.pdf>  
Problem 1(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14perkinsExII.pdf>  
Problem 4(a) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14taggartExII.pdf>  
Problem 2(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126aut13lovelessExII.pdf>  
Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr13lovelessExII.pdf>  
Problem 3(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>  
Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr10lovelessExII.pdf>

**For practice with 15.4:**

Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14lovelessExII.pdf>  
Problem 4(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr14taggartExII.pdf>  
Problem 3 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126aut13lovelessExII.pdf>  
Problem 4(b) from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr11lovelessExII.pdf>  
Problem 4 from: <http://www.math.washington.edu/~m126/midterms/midterm2/m126spr10lovelessExII.pdf>

I hope some of this helps.

Dr. Andy Loveless