

## Math 307 Week 5 Newsletter – Dr. Loveless

### UPCOMING SCHEDULE:

Friday: Section 3.4: Repeated roots and reduction of order  
Monday: Section 3.5: Undetermined Coefficients  
Wednesday: Section 3.5: Undetermined Coefficients  
Next Friday: Section 3.7: Free Vibrations (The beginning of our applications)

### HOMEWORK:

HW 4 is posted: <http://www.math.washington.edu/~aloveles/Math307Spring2016/homework.html>

### NEW POSTING:

Here, again, is the course website: <http://www.math.washington.edu/~aloveles/Math307Spring2016/index.html>  
These are all original review sheets written by me.

1. **Detailed 3.3 (Complex Roots Characteristic Equation Problems) Review and Additional Worked Examples:**  
<http://www.math.washington.edu/~aloveles/Math307Spring2016/m307Review3-3.pdf>
2. **Detailed 3.4 (Repeated Roots and Reduction of Order) Review and Additional Examples:**  
<http://www.math.washington.edu/~aloveles/Math307Spring2016/m307Review3-4.pdf>
3. **Summary of 3.1, 3.3, and 3.4 (Solving Homogeneous Second Order Linear Equations) with practice problems:**  
<http://www.math.washington.edu/~aloveles/Math307Spring2016/m307ReviewLinearHomogeneous.pdf>
4. **Detailed 3.5 (Undetermined Coefficients) Review and six fully worked examples with solutions:**  
<http://www.math.washington.edu/~aloveles/Math307Spring2016/m307Review3-5.pdf>
5. **Skills Review – Everything you need to know about solving 2-by-2 linear systems (read this carefully):**  
<http://www.math.washington.edu/~aloveles/Math307Spring2016/m307Solving2x2Systems.pdf>
6. **Skills Review – Working with Sine and Cosine waves:**  
<http://www.math.washington.edu/~aloveles/Math307Spring2016/m307Waves.pdf>

### OLD EXAMS:

Here, again, is my personal Math 307 exam archive:  
<http://www.math.washington.edu/~aloveles/Math307Spring2016/examarchive.html>  
And here is some targeted practice on the current material.

*Practice for 3.1, 3.3, and 3.4 (Solving Homogeneous Linear Second Order Equations):*

- Problem 5: <http://www.math.washington.edu/~aloveles/Math307Spring2016/midterm1e.pdf>  
Problem 1: <http://www.math.washington.edu/~aloveles/Math307Spring2016/midterm2.pdf>  
Problem 1(a): [http://www.math.washington.edu/~aloveles/Math307Spring2016/wi\\_11\\_practice\\_sisodia.pdf](http://www.math.washington.edu/~aloveles/Math307Spring2016/wi_11_practice_sisodia.pdf)  
Problem 1(a): <http://www.math.washington.edu/~aloveles/Math307Spring2016/t2.pdf>  
Problem 5: <http://www.math.washington.edu/~aloveles/Math307Spring2016/307Midterm2,Fall13.pdf>

*Practice for 3.4 (Reduction of Order):*

- Problem 6: <http://www.math.washington.edu/~aloveles/Math307Spring2016/midterm1e.pdf>  
Problem 5: <http://www.math.washington.edu/~aloveles/Math307Spring2016/sp15m307e2.pdf>  
Problem 3: <http://www.math.washington.edu/~aloveles/Math307Spring2016/midterm1a.pdf>  
Problem 4: [http://www.math.washington.edu/~aloveles/Math307Spring2016/wi\\_13\\_practice\\_caday2.pdf](http://www.math.washington.edu/~aloveles/Math307Spring2016/wi_13_practice_caday2.pdf)

I hope this helps!

Dr. Andy Loveless