Math 125 End of Week 9 Newsletter

UPCOMING SCHEDULE:

Friday: Section 9.4 (Applications of Separable Differential Equations)

Monday: Holiday
Tuesday: HW Q & A
Wednesday: Final Review
Thursday: Final Review
Friday: Final Review

The Math 125 Final is Saturday, June 3rd, from 1:30-4:20pm in ARC 147.

HOMEWORK:

Closing Wednesday at 11:00pm: HW 9A,9B (covers 9.1, 9.3, 9.4).

HW_8: median score = 100%, median time students had browser open to assignment = 162 minutes

HOMEWORK COMMENTS AND HINTS:

On HW 9: Ask questions in quiz section. Separate, integrate, simplify. And use given information.

NEW AND LAST POSTINGS

Here, again, is the course website:

No significant new postings, but do check out my lecture notes (the 8.3 lecture notes contain every formula you need for that section):

1. Final Review Checklist:

http://www.math.washington.edu/~aloveles/Math125Spring2016/FinalReview.pdf

2. Quick Review of New Material (8.3 and Chapter 9):

http://www.math.washington.edu/~aloveles/Math125Spring2016/AfterExam2Material.pdf

3. **Longer Discussion of Differential Equation Applications** (this goes a bit beyond what you need to know, but it should help you get a stronger understanding):

http://www.math.washington.edu/~aloveles/Math125Spring2016/9-4DifferentialEquations.pdf

4. Lecture notes (see the 9.1 lecture material for a summary of applications):

http://www.math.washington.edu/~aloveles/Math125Spring2016/lecture.html

Supplemental Postings:

Here are two review sheets from the first two weeks of my Math 307 course. These are more in-depth application review sheets with examples and practice problems. These problems are harder than in this class, so if you can do these problems then you will be more than ready for anything we can ask on our final.

My Math 307 Differential Equation Application Discussion:

http://www.math.washington.edu/~aloveles/Math307Spring2016/m307Review2-3.pdf

My Math 307 Differential Equation Application Practice Problems:

http://www.math.washington.edu/~aloveles/Math307Spring2016/DifferentialEquationApplications.pdf

OLD EXAMS:

The math departmental **final exam archive** is here: http://www.math.washington.edu/~m125/Quizzes/Q10.php Here are some targeted practice problems from old exams on the current material:

NOTE: The last two pages of almost every final in the archive is about differential equations, so you can find a lot more practice that what is listed below. I randomly clicked on several old finals and categorized what I saw as follows:

for practice using section 9.3 material (Separable Equations straight solving):

Problem 9: http://www.math.washington.edu/~m125/Quizzes/week10/125finalW16.pdf
Problem 9: http://www.math.washington.edu/~m125/Quizzes/week10/125finalW13.pdf
Problem 9: http://www.math.washington.edu/~m125/Quizzes/week10/125finalA15.pdf
Problem 9: http://www.math.washington.edu/~m125/Quizzes/week10/125finalA15.pdf

for practice using section 9.4 material (Differential Equations Applications):

Newton's Law of Cooling:

Problem 10: http://www.math.washington.edu/~m125/Quizzes/week10/125finalW13.pdf
Problem 10: http://www.math.washington.edu/~m125/Quizzes/week10/125finalSp12.pdf
Mixing Problems:

Problem 10: http://www.math.washington.edu/~m125/Quizzes/week10/125finalW15.pdf
Problem 10: http://www.math.washington.edu/~m125/Quizzes/week10/125finalW10.pdf

Savings Money:

Problem 10: http://www.math.washington.edu/~m125/Quizzes/week10/125finalSp13.pdf
Problem 9: http://www.math.washington.edu/~m125/Quizzes/week10/125finalW11.pdf

Equation Given:

Problem 10: http://www.math.washington.edu/~m125/Quizzes/week10/125finalW12.pdf
Problem 11: http://www.math.washington.edu/~m125/Quizzes/week10/125finalW16.pdf
http://www.math.washington.edu/~m125/Quizzes/week10/125finalW16.pdf

I hope some of this helps.

Dr. Andy Loveless