

Math 4560 Homework for Chapters 4 and 5

C. Chicone

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Due Thursday 24 September

1. 4.3.2 (oscillation period of non uniform oscillator)
2. One of the problems 4.5.1 or 4.6.4. Electrical engineers should choose problem 4.5.1. But, the choice is up to you. You should do some reading in Strogatz book before attempting one of these problems.
3. 5.1.9 (may be good practice for the exam)
4. 5.1.11 (Do the proofs for parts (a) and (e) only of problem 5.1.10. This problem is more theoretical than usual. Let's see if you can write a simple mathematical proof. Don't forget to write in complete sentences.)