Math 285, Section P1

Homework 9

Will not be collected

Section 3.2. (textbook pages 170-172) Exercises: 40 – 44;


Section 3.4. (textbook pages 195-197) exercises: 15, 17, 18, 3, 4, 5, 6, 8, 12, 13, 14.

Section 3.6. (textbook page 222) Exercises: 3, 4, 12, 14, 16, 18, 23, 24, 25.


Problem I: This is an optional problem. Turn it in for extra credit. The mass of a car that acts on one wheel is 100 kg. The elasticity (spring) constant in the suspension system of that wheel is \( k = 10^4 N/m \). Design the strut (find the friction/resistance constant \( c \)) such that any vertical motion of the wheel (set up for example by going over a bump or pothole on the road) will die out in the shortest amount of time.