Differential Equations

Week 5

Monday September 28 : *Worksheet 8*:

Linear Differential Equations. We will learn about the Linearity Principle and how it helps us to solve an entire clas of ODEs.

Reading:

Blanchard, Section 1.8

Homework #8:

Blanchard, Section 1.8: 4, 5, 8, 9, 17, 18, 20.

Wednesday September 30 : *Worksheet 9*:

Integrating Factors. We will learn a very cool analytical technique for obtaining a formula for solutions of linear ODEs.

Reading:

Blanchard, Section 1.9

Homework #9:

Blanchard, Section 1.9: 4, 5, 9, 12, 19

Friday October 2 *Worksheet 10*:

First Order Systems of ODEs. We will be introduced to models that involve a system of first order differential equations.

Reading:

Blanchard, 2.1

Homework #10:

Blanchard, Chapter 1 Review: 3, 4, 6, 10, 11, 12, 29, 47
Quiz #2