MATH 240 — HOMEWORK 13.

due on Monday, April 23.

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Topics:
• Chapter 9 Systems of Differential Equations
  – 9.1 First Order Linear Systems
  – 9.2 Vector Formulation
  – 9.3 General Results for Systems.
  – 9.5 Vector Differential Equations: Defective Coefficient Matrix
  – 9.8 Matrix Exponential and Systems
  – 9.9 The Phase Plane of Linear Autonomous Systems
  – 9.10 Nonlinear Systems

Thirteenth Homework Assignment.

Reading:
• Read Sections 9.5, 9.8, 9.9 and 9.10. Start reviewing for the final.

Problems: Make sure you can do all the Core Problems for for Sections 9.4, 9.5 and 9.8 to 9.10, but write up (only) the following problems to be handed in:

• Section 9.4 (page 607)
  – True-False Review: b, c, d, ; Problems: 4, 8, 11, 18, 22
• Section 9.5 (page 618)
  – True-False Review: a, c, d, ; Problems: 4, 8, 16, 17
• Section 9.8 (page 642)
  – True-False Review: b, c, d, e; Problems: 2, 5, 10, 11
• Section 9.9 (page 653)
  – True-False Review: b, d, e, f. Problems: 3, 8, 10, 12, 14
• Section 9.10 (page 662)
  – True-False Review: a, c, d, e; Problems: 3, 5, 6, 8