

**HOMEWORK FOR MATH154, FINITE MATHEMATICS
SPRING 2011
WITH DR. CHRISTOPHER E ELMER
USING *FINITE MATHEMATICS*, ROLF**

To be successful in learning mathematics one should work as many problems as possible. You are expected to have a complete understanding of the following list of problems.

Linear Functions

- 1.1 Functions: 1 - 38.
- 1.2 Lines: 1 - 114.
- 1.3 Modeling: 1 - 63.

Linear Systems and Matrices

- 2.1 Two Equations: 1 - 40.
- 2.2 Three Variables: 1 - 52.
- 2.3 Gaussian Elimination: 1 - 63.
- 2.4 Addition: 11 - 44, 49, 50, 52 - 56.
- 2.5 Multiplication: 1 - 6, 9 - 61.
- 2.6 The inverse: 1 - 44.

Linear Programming

- 3.1 Inequalities: 1 - 29.
- 3.2 Geometric Solutions: 1 - 40.
- 3.3 Linear Programing: 1 - 37.

Simplex Method

- 4.1 Slack Variables: 1 - 16.
- 4.2 The Method: 1 - 40.
- 4.3 Minimization: 1 - 22.
- 4.4 Mixed Constraints: 1 - 30.
- 4.5 Other Cases: 1 - 16.

Sets and Counting

- 6.1 Sets: 1 - 63.
- 6.2 Venn: 1 - 18.
- 6.3 Counting: 1 - 31 odd.
- 6.4 Permutations: 1 - 35 odd.
- 6.5 Combinations: 1 - 37 odd.

Probability

- 7.1 Intro: 1- 11.
- 7.2 Equal: 1 - 20 odd.
- 7.3: 1 - 23 odd.

Finance

- 5.1 Simple: 1 - 32.
- 5.2 Compound: 1 - 17 odd.
- 5.3 Annuities: 1 - 21.
- 5.4 Present Value: 1- 23 odd.