Concepts to know Exam 1

Chapter 1 and Chapter 2 and section 3.2

• Lines
  – Intercepts
  – Point Slope Formula
  – Finding equations of lines
  – Graphing
  – Linear Modeling

• Cost, Revenue, and Profit Equations

• Break even Values

• supply and demand functions

• equilibrium point

• quadratic functions
  – vertex
  – open up/down
  – maximum/minimum
  – revenue function from the demand function

• Solving systems of equations
  – Substitution method
  – Subtraction/addition method
  – Gauss-Jordan Method
  – rref
  – Matrices
  – Different types of answers
    * No solution
    * Exactly one solution
    * Infinite solutions.
    • Written in parametric form.
    • Placing restriction on the parameter.

• Row reduced form

• Matrix Operations
  – Addition
  – Subtraction
  – Multiplication
  – Equality

– Scalar multiplication
– Transpose

• Translating word problems to systems of equations.

• Translating word problems to linear programming problem.

• Any additional topic discussed in class.