MA162: Finite mathematics

Jack Schmidt

University of Kentucky

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SCHEDULE:

- HW 1.1-1.4 are due Friday, Jan 20th, 2012.
- HW 2.1-2.2 are due Friday, Jan 27th, 2012.
- Exam 1 is Monday, Feb 6th, 5:00pm-7:00pm in CB106 and CB118.

Today we will cover two more linear models.

Linear supply, linear demand, and market equilibrium

- Supply: $x = 4p + 200$

- Demand: $(p = 4, x = 1170)$, $(p = 17, x = 0)$, linear in-between

- Find Equilibrium: when supply equals demand

- Standard exam question

Profit, Cost, Revenue

- Cost is how much money you lose trying to sell:
  - Fixed cost: you pay no matter how many you sell (rent, major equipment)
  - Marginal cost: you pay per unit sold
  - Together these give a linear cost model
- Revenue is how much money you get back when you sell:
  - Ignore the cost
  - Most revenue is marginal, get paid for what you do
- Profit is the difference: $P = R - C$
- Break-even is where $R = C$ or $P = 0$
- Standard exam question: Given marginal revenue, and two samples of the cost, find the break even product

Homework!

- Homework is due THIS Friday. Online.

- At 2pm, I will be in the mathskeller, CB63.

- Computers that work, assignments takes about 3 minutes

- Chapter 1 due Friday.