1.224J Recitation #3

Networks

and

Introduction to AMPL
Topics

• Network formulation review
• Tournament example
• Product distribution example in AMPL
Network highlights

• Node-arc incidence matrix
• Sign convention
  – Arc from i to j , i gets the +1, j gets the -1
  – Convention: b(i) positive for supply, negative for demand
• Integer data…integer solutions
Tournament problem

- $N$ teams compete in a tournament of $k$ rounds. During each round, each team plays every other team once. Given a particular outcome vector (for example, team 1 won 3 games, team 2 won 7 games…) decide if that is a possible outcome.
Product distribution network