

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

