

## MATH 460 Session 18

The following problem is introduced in Maki & Thompson's "Mathematical Models and Applications," Prentice-Hall:

Mr. Wheeler owns two factories at which he assembles mobile homes, and in addition he operates three regional distribution centers at which the homes are sold. Over a period of time he has kept careful records, and consequently he has a good idea of about how many homes will be sold each month at each of the centers. Also, he is able to estimate production rates, and therefore he knows (approximately) how many homes will be available each month at the factories. Finally, he is able to obtain commitments from mobile home movers to ship homes from his factories to his lots at a specific rate. The rate, of course, varies with the origin and destination of the home. Mr. Wheeler's concern is to determine the most economical allocation of homes from his factories to the distribution centers. This is to be interpreted as minimizing the shipping costs while fulfilling demand.