Assignment 4

2. 1) Let X_{ij} = # of brls to ship from node i to j

$MinC = 1.52X_{1A} + 1.60X_{1B} + 1.40X_{1C} + 1.70X_{2A} + 1.63X_{2B} + 1.55X_{2C} + 1.45X_{3A} + 1.57X_{3B} + 1.30X_{3C}$

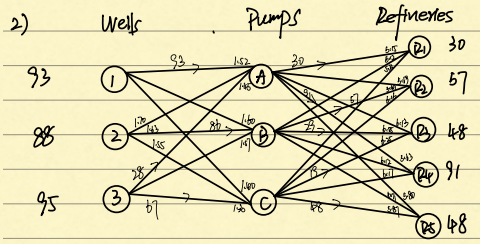
$+ 5.15X_{A1} + 5.09X_{A2} + 6.13X_{A3} + 5.06X_{AP} + 5.80X_{AS} + 5.12X_{B1} + 5.67X_{B2} + 6.05X_{B3} + 6.12X_{BP}$

$+ 5.71X_{BS} + 5.32X_{C1} + 6.46X_{C2} + 6.25X_{C3} + 6.17X_{CP} + 6.87X_{CS}$

(276) (274)

Supply > Demand

2)



Constraints $X_{1A} + X_{1B} + X_{1C} \leq 93$

$X_{2A} + X_{2B} + X_{2C} \leq 88$

$X_{3A} + X_{3B} + X_{3C} \leq 95$

$X_{A1} + X_{B1} + X_{C1} = 30$

$X_{A2} + X_{B2} + X_{C2} = 57$

$X_{A3} + X_{B3} + X_{C3} = 48$

$X_{AP} + X_{BP} + X_{CP} = 91$

$X_{AS} + X_{BS} + X_{CS} = 48$

$X_{1A} + X_{2A} + X_{3A} - X_{A1} - X_{A2} - X_{A3} - X_{AP} - X_{AS} = 0$

$X_{1B} + X_{2B} + X_{3B} - X_{B1} - X_{B2} - X_{B3} - X_{BP} - X_{BS} = 0$

$X_{1C} + X_{2C} + X_{3C} - X_{C1} - X_{C2} - X_{C3} - X_{CP} - X_{CS} = 0$

$X_{ij} \geq 0$