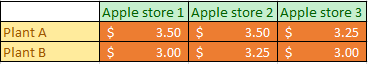
**Network Optimization Model: Q47 Page: 268, Modified version**

**Problem statement:**

Apple has 2 plants A & B, where A can assemble 10,000 iPhone and B can assemble 6,000 iPhone per week. These phones need to be shipped to 3 different iStores at different locations. As the company has received an overwhelming response for the newly launched iPhone, each iStores needs 5,000 pieces of phones to meet this demand per week. Create an Optimization Model to Minimize transportation cost of iPhone from Plant's to respective iStores. Transportation cost of iPhone from Plant to iStore is as follows:



**Model:**

*Input Parameters 🡪*

*: Capacity of Plant to assemble # of iPhones per week, where .*

*: Demand of iPhones at iStore per week, where .*

*: Transportation cost of shipping iPhone from Plant to iStore .*

*Decision Variable 🡪*

*: Quantity of iPhones to be shipped from Plant to iStore .*

*Objective Function 🡪 Minimize Cost*

*Constraints 🡪*

1. *& Integer ……………………Non negativity & integer constraint.*
2. *……. For all ………….Quantity produced should be larger than demand of iStore*
3. *……. For all …………. Quantity produced should be less than capacity of plant.*