**Assignment 2**

1-  Office building maintenance plans call for the stripping, waxing, and buffing of ceramic floor tiles. This work is contracted out to maintenance firms, and both technology and labor requirements are very basic.

Supply and demand conditions in this perfectly competitive service market in New York are:

Supply:    Qs = 2P - 20

Demand:   Qd = 80 - 2P

Where Qs and Qd are measured in thousands of hours of floor reconditioning per month, and P is the price per hour.

A.      Algebraically determine the market equilibrium price and equilibrium output combination.

B.     Use a graph to confirm your answer using Excel.

**Helpful Directions for drawing S and D graphs:**

To draw the supply and demand graphs in Excel, I suggest you create a table with 3 columns in Excel by following these basic steps:

I-Label the columns in your table as: Price, Qd, Qs For the price column:

II-Fill in the price column with prices 10, 15, 20, 25, 30, 35, 40

III-Calculate  Qd column by substituting the prices in Qd equation given above.

IV-Calculate  Qs column by substituting the prices in Qs equation given above.  
 V- Highlight the table including the labels and click on the Chart Wizard in Excel to draw the graph.  
  
  
2. The figure below shows a firm in a perfectly competitive market:

a.       Find the price below which the firm will go out of business.

b.      What is the firm’s long run supply curve?