## Assignment 2

Due in tutorials in the week of October $19^{\text {th }}$

1. Do problem 36 from chapter 7. (3 marks)
2. Comparative advantage exists for all parties involved in trade because there must always be something in which a person/country is more productive. Is this true or false? Explain fully using an example. Is it possible that comparative advantage does not exist? (3 marks)
3. Consider the following statement: 'When a genetically modified variety of corn was introduced, production of corn increased, the price of corn fell and the amount of money people spend on corn decreased." Does this mean that as the quantity of corn increased both total and marginal values of fruit decreased? Use diagrams and economics concepts to fully explain what happened in the market for corn as new variety was introduced. (4 marks)

For the following problems show all your calculations and shortly explain your steps. If you do not show your work your answer will get zero marks even if it is correct.
4. Do problem 38 from chapter 7. (4 marks)
5. John's weekly demand for milk is given by $P=6-Q_{J}$ where $Q$ is pints of milk and $P$ is the price he is willing to pay for each pint. Mary's weekly demand for milk is given by $P=8-Q_{M}$. John has a cow that yields 9 pints of milk per week. ( 6 marks, each part is worth 2 marks)
(a) Construct a box with marginal values similar to Figure 6-2 on p. 120 of the textbook. Is it an equilibrium behavior for John to drink all his milk? Explain. Find equilibrium price and quantities of milk demanded by John and Mary.
(b) Calculate and show on the diagram you constructed for part (a) gains from trade. Explain the logic behind your calculations. Is equilibrium that you found efficient? Explain what efficiency means in this context.
(c) Redo the exercise using market demand and supply. Find and draw on a diagram John's, Mary's and market demand curves for milk. Show the supply curve. Find and show on your diagram equilibrium price of milk and quantities consumed by John and Mary.

