## Question $\# 3$

Consider an economy with two agents, Argentina and Brazil. The economy only produces two goods, coffee and sugar. Argentina and Brazil can produce the goods as follows:

|  | Coffee | Sugar |
| :---: | :---: | :---: |
| Argentina | 4 hours/unit | 2 hours/unit |
| Brazil | 6 hours/unit | 4 hours/unit |

(a) Fill in the following table, computing the opportunity cost of production of each good for each country:

|  | Coffee | Sugar |
| :---: | :---: | :---: |
| Argentina | 2 units of Sugar | $\frac{1}{2}$ units of Coffee |
| Brazil | $\frac{3}{2}$ units of Sugar | $\frac{2}{3}$ units of Sugar |

Note: To get this table you can assume that there are only 60 Total Hours each country has, you can pick any number for total hours you will still get the same answer but 60 hours will make the math a little easier. Or you can ask the question to get one more unit of coffee how many units of sugar would I have to give up?
(b) Who has the absolute advantage in the production of coffee? Why?

Argentina has the absolute advantage in the production of coffee because they use fewer resources to produce one unit of coffee.
(c) Who has the comparative advantage in the production of coffee? Why?

Brazil has the comparative advantage in the production of coffee because they have a lower opportunity cost.
(d) Consider the price of coffee in terms of sugar. What is the highest price at which coffee can be traded that would make both countries better off? What is the lowest price? Explain.

The highest price coffee will be traded for is 2 units of Sugar, because any higher and Argentina would not be willing to buy Coffee because they can produce it for less. The lowest price of coffee will be traded for is $\frac{3}{2}$ units of Sugar because any lower and Brazil would not be willing to trade because they are selling the coffee for less then what it cost them to make it.

