Supply and Demand

1. In the picture above, the participant is a seller. What is the seller's goal? What pieces of information should the seller consider to achieve their goal?

2. I was a (circle one) buyer/seller in the game and my value/cost increased/decreased across units. This reflects what economic concept? Explain.

3. It is likely there were a number of bids and asks on the screen that would have resulted in positive profit. What was your approach to choosing which offers to accept?

4. When you submitted your first (circle one) bid/ask did others accept it immediately? If not, did did you need to revise your bid upward or ask downward? What did you learn from either experience?

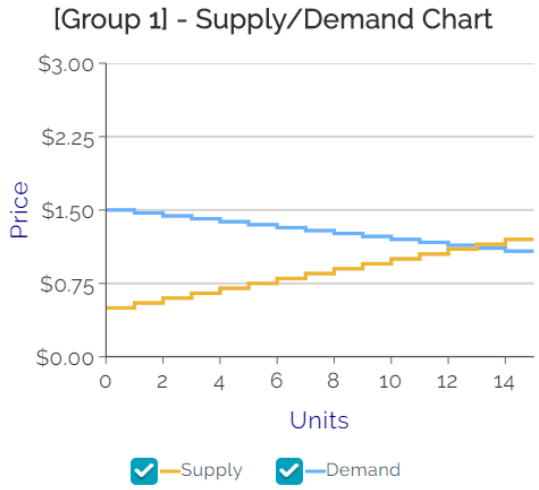
5. If we linearize the demand and supply curves from this game, the demand curve is described by the equation $P = 150 - (38/13)Q$ and the supply curve is $P=50 + (62/13)Q$. Find the equilibrium quantity and price (noting that price is in pennies).

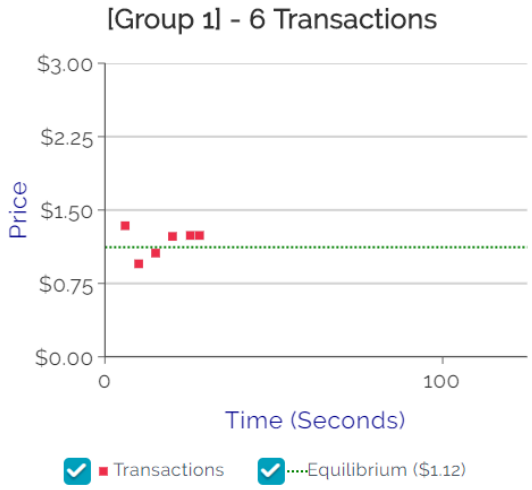
6. What is the total surplus in this market? How does this relate to efficiency?

7. What do demand curves depend on? (i.e. what sorts of things lead to shifts in demand)? If bananas are substitutes and the price of bananas increases, what do we expect to happen to the demand for oranges?

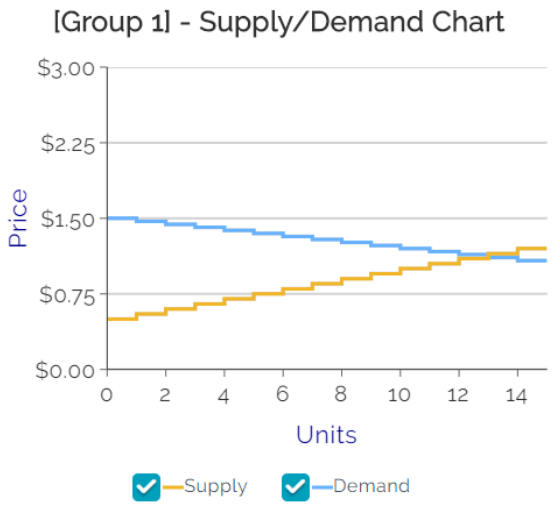
8. In this question, I'll ask you to compare past data from an experiment. Across time, the equilibrium prediction is that price will tend towards $1.12 and there will be 13 units transacted. In Round 1, Group 1 traded 6 units at an average price of $1.20. In Round 2, Group 1 traded 11 units at an average price of $1.08. What do differences between rounds suggest about when economic models will result in good quantitative predictions of human behavior?

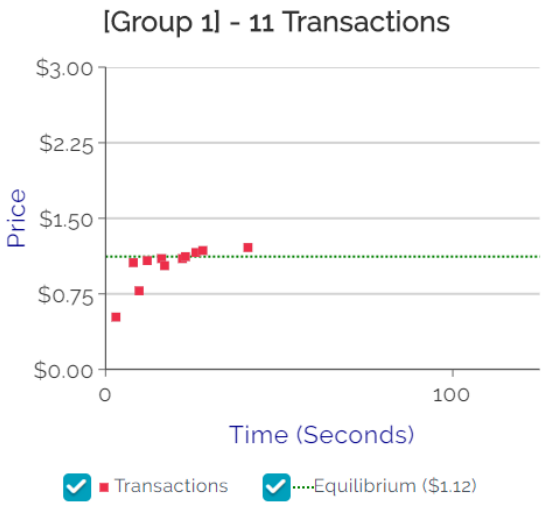
Round 1





Round 2





9. In textbook discussions of the model of perfect competition (on which the supply and demand curve are based) the following are assumed. In the experiment you just participated in, please check all the assumptions that actually apply. If markets function well (as the experiment often shows) what does your answer to this question imply about markets

_____ In this game the good traded was homogenous.

_____ In this game there were a large number of traders in my group.

_____ In this game goods could be divided into smaller and smaller units.

_____ In this game buyers and sellers were price-takers.

_____ In this game buyers and sellers have information about the complete value and cost schedules for all other market participants.

_____ In this game there was free-entry and exit.

10. Reflect on your own experiences as a consumer. Discuss some different ways that buyers and sellers meet each other and "agree" on a price. How are these ways different from what happened in the experiment? What differences do you think those rules make for whether the equilibrium prediction is obtained?

11. The double auction experiment (what you participated in) is based on research from Nobel Prize winner Vernon Smith. When he was a graduate student at Harvard, Smith experienced a different market where,

"[The Professor] gave each buyer a card with a maximum buying price for a single unit, and each seller a card with a minimum selling price for one unit. All of us were instructed just to circulate in the room, engage a buyer (or seller), negotiate a contract, or go out to and another buyer (or seller) and so on. If a buyer and a seller made a contract, they were to come to [the Professor], reveal the price of the exchange, turn in their cards, and he would post the price on the blackboard for all to see."

Students would play this game for a single round. The market Smith experienced as a graduate student did not converge to the price-quantity prediction; however, the double auction would consistently converge to the equilibrium prediction. Explain why you think equilibrium is reached in one market and not the other (Hint: It has nothing to do with hand-run v. computerized).

12. What was the most important thing you learned today? What questions still remain in your mind?