Experiment 2

Entry and Equilibrium Dynamics

Restaurant Setup

- Everyone is a demander of a meal. There are approximately equal numbers of values at ★24, ★18, ★12 and ★ 8. These will change, due to a random development, after 2.2.
- Everyone gets the chance to open a restaurant each round.
- To open a restaurant, you must sign up with the market manager at the beginning of the experiment for which you would like to open.
- There is a signup sheet with the market manager.
- Note that restaurants last two periods.

Costs

- A restaurant costs ★20 **per period** (fixed and sunk cost) to open and can sell up to 4 meals. The ingredients (variable cost) cost ★5 per meal. Thus total cost of a restauranteur depends on the number of meals served:

Meals	0	1	2	3	4
Total Cost	20	25	30	35	40
Average Cost	∞	25	15	11.7	10

Additional Considerations

- **Timing of the experiments:**
  - Restaurant sign-up
  - X announced (2.3 only)
  - Trade, Let's Eat!
- **Questions:**
  - What average price of meals do you need to insure a profit?
  - What is the lowest price a restauranteur will accept?
  - Should you ever not eat in your own restaurant?

Typical Restauranteur Sheet.

Diner's Name:			
Experiment	Value	Restauranteur	Price of Meal
2.1	★24		★
2.2	★18		★
2.3	★8 + X		★
2.4	★12 + X		★
2.5	★8 + X		★

Opened:8.____ Restauranteur:			
8.___	Diner's Name	Diner's Value	Price of Meal
1		★	★
2		★	★
3		★	★
4		★	★
8.___	Diner's Name	Diner's Value	Price of Meal
1		★	★
2		★	★
3		★	★
4		★	★

Goals

- Firms face fixed and variable (depend on quantity sold) costs.
- Firms will not sell for less than their variable costs.
- Firms will sell for less than their average total cost (that is, the sum of their average variable and average fixed costs). Such firms make *accounting* losses.
- When prices are below average total cost, the firms will exit the industry. Some exit is immediate if prices are below minimum average variable cost.
- Prices above average total cost induce entry, bringing prices down to average total cost.

Goals, Continued

- If entry takes time, there will be a short run and long run supply curve. The long run supply curve is more elastic than the short run supply curve.
- The short run supply is zero below minimum average variable cost, and follows the marginal cost curve for prices above min AVC.
- The long run supply curve is just the minimum average total cost.
- Dynamic response to demand shifts are given as follows. In the short run, the path of prices and quantities follows the short run supply curve to the intersection of short run supply and demand. Then price and quantity follow demand to the intersection of long run supply and demand.