

Week 1 Recitation

GTA Instructions

- (20 minutes) INTRODUCTIONS: Introduce yourself and ask your students to do the same.
- (30 minutes) PRACTICE PROBLEMS: Go over the practice problems. It may make more sense to review as you go through these problems instead of front-loading the review.

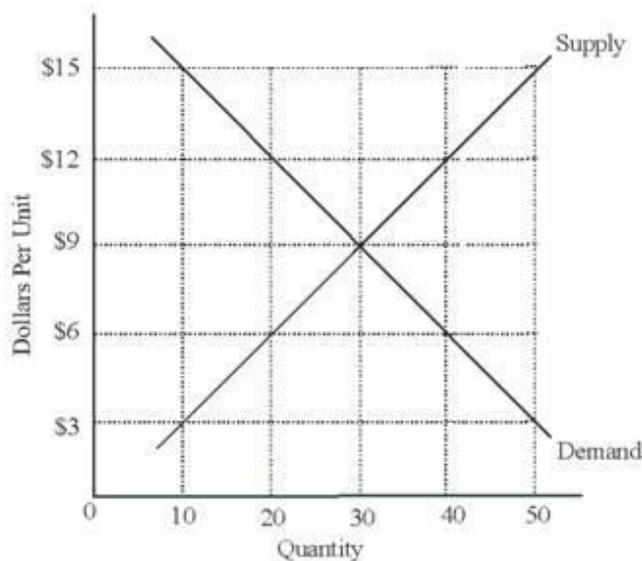
Introductions

- Talk about yourself (where are you from, where did you go to school, what's your research interests, hobbies, etc).
- This is also a good moment to talk about how students can reach you (email, office hours, through Canvas, etc) and ask if they have more questions about syllabus or the class in general. The instructor presents that information in the first lecture, but most students are more comfortable asking questions during recitation.
- Ask students to present themselves. You can either ask them to read what they posted on Canvas out loud or do something completely different. In general, students are more engaged when you ask them to share things like their spiritual animal, an interesting thing they did for summer, something new they started during the pandemic, etc. You can also divide them in groups of two or three, give them 5min to get to know each other, then ask students to introduce the other member of the group/pair for the class.

Practice Problems

In the first lecture, we talked about the fact that microeconomics and macroeconomics are not separate subjects, but complementary perspectives (OpenStax, Chapter 1). In the second lecture, we saw how individual decision affect the whole, and why it is important to identify and differentiate the demand side and supply side of the GDP (OpenStax, Chapter 6). So, in this recitation, we are going to work on exercises to review supply and demand models – something the students learned on ECON202 (Principles of Microeconomics).

1. The graph below shows the market for pizzas in Fort Collins. Why does the demand curve slope down? Why does the supply curve slope up? Based on the figure, what is the equilibrium price and quantity (in thousands) for pizza?



You may want to draw these curves on the board and explain them as you draw. The demand curve slopes down because as the price falls, people will demand more pizza. The supply curve is upward sloping because as the price rises, more pizza shops will open, or existing pizza shops will be willing to ramp up their production. The equilibrium in this market is \$9 per pizza with 30,000 pizzas bought/sold.

2. If the price of a pizza was \$12, what would happen in this market?

At \$12, pizza shops would be willing to sell more pizza than people are willing to buy at that high price. We say there is an “excess supply” of 20 pizzas in this case. Firms have an incentive to try and get something for their product rather than nothing so they will cut prices. Some pizza shops will not be profitable at the lower price and will be driven out of business (and/or existing shops will cut back production). This leads us closer to equilibrium.

3. If the price of a pizza was \$3, what would happen in this market?

At \$3, pizza shops would not be willing to sell as much pizza as people are willing to buy at that low price. We say there is an “excess demand” of 40 pizzas in this case. Firms have an incentive to raise the price knowing that they can get more. Some new pizza shops will be enticed to enter the market as the price of pizza rises (or existing shops will ramp up production). This leads us closer to equilibrium.

4. Supply and demand can also be expressed in a table instead of a graph. Moreover, it is important to know that **market** supply and demand is simply the sum of **individuals’** supply and demand. Use the data below on the supply/demand of fast-food meals to answer the following questions:

- (a) What is the equilibrium price and quantity for fast-food meals in this market?

Price	Quantity Demanded				Quantity Supplied			
	Alejandro	Chen	Karl	Market	Marco	Janae	Katie	Market
\$10	8	4	2	14	60	4	6	70
\$8	12	4	4	20	42	4	4	50
\$6	20	4	6	30	24	4	2	30
\$4	22	4	6	32	6	4	0	10
\$2	23	5	8	36	3	4	0	7

$P_e = \$6$ $Q_e = 30$

- (b) If the price of a fast-food meal was \$2, what would happen in this market?

If market price is \$2, we have a shortage of 29 units. Describe how if this is the case, firms have an incentive to raise price knowing that they can get more. This will cause price to head toward equilibrium.

- (c) If the price of a fast-food meal was \$8, what would happen in this market?

If market price is \$8, we have a surplus of 30 units. Firms have an incentive to try and get something for their product rather than nothing so they will cut prices. This leads us closer to equilibrium.

5. Determine the effect of changes in supply or demand on equilibrium price and quantity when there is a change in supply and/or demand.

Notes for GTA: students tend to be very confused about the fact that, when there is an increase in the supply, the supply curve shifts down (i. e. to the right), while when there is an increase in demand, the demand curve shifts up (i. e. to the right). In general, using the terms “shift right/left” instead of “shift up/down” makes it easier for them. Also, reminding them about the concept of substitute goods and complementary goods before jumping in this exercise is a good idea.

Example	Market	Impacts Supply or Demand?	Shift Factor	Demand/Supply Increase or decrease?	Equilibrium Price ↑ or ↓?	Equilibrium Quantity ↑ or ↓?
1. In a press conference, Cristiano Ronaldo refuses to drink soda and incentives people to buy water	Water	Demand	Change in tastes	D↑	P↑	Q↑
2. The expiration of drug patents increases the number of generic drugs available to consumers	Drugs	Supply	Increase in # of sellers	S↑	P↓	Q↑
3. A drought in California increases the cost of water utilized in citrus crops	Citrus	Supply	Change in input prices	S↓	P↑	Q↓
4. Apple starts selling iPhone chargers separately at unreasonably high prices	iPhone	Demand	Increase in the price of a complement	D↓	P↓	Q↓

