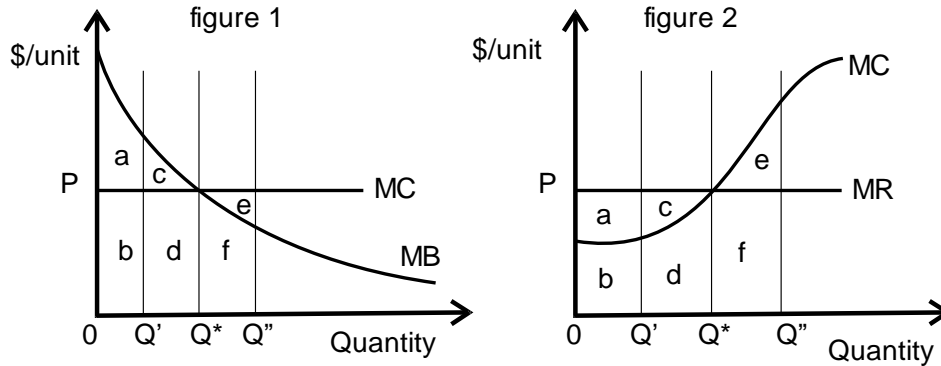


Homework 1

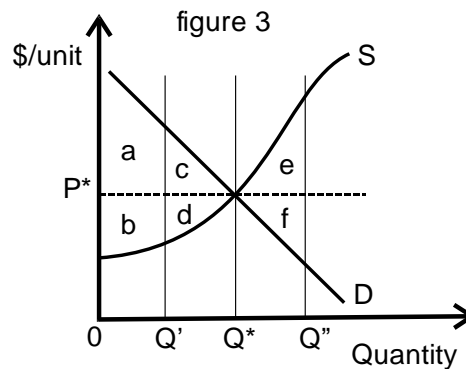
Econ 201H



Homework 1 reviews the basic models of consumer and firm choices and their implications for market equilibria. The results that you “turn in” will simply be a list of your multiple-choice answers ((1) d, (2) c, etc.), but you should think carefully about each question using the information and models covered in class and the class notes to determine which of the graphs that are relevant for determining the correct answers. In some cases, you’ll want to draw a diagram or two to reach the right conclusion. (The midterm exam will not be multiple choice and you will often have to draw your own diagrams.)

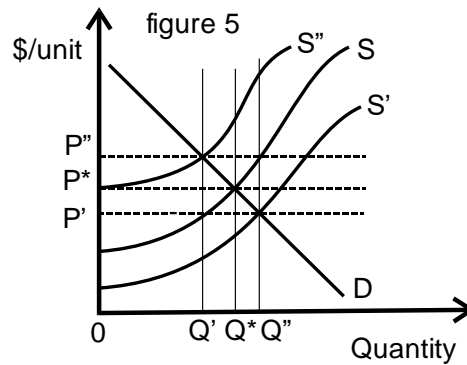
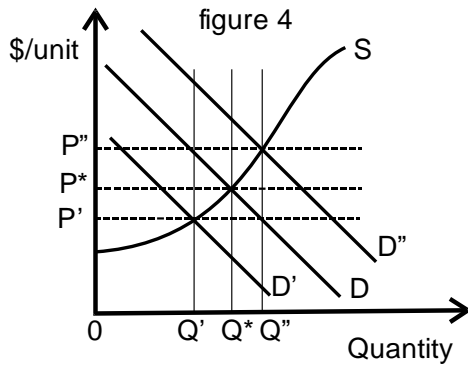
- (1) Which of the above figures characterizes a typical “price taking” firm’s choice of output?
 - a. Figure 1
 - b. Figure 2
- (2) If the market price is P , how much consumer surplus does the individual consumer depicted (A1) realize?
 - a. “a”
 - b. “b”
 - c. “a” + “c”
 - d. “b” + “d”

- (3) If the market price is P , what is the profit realized by a typical firm in the market depicted?
- “a”
 - “b”
 - “a” + “c”
 - “a” - “b”
- (4) Suppose that the consumer (Al) cannot purchase Q^* units of the good but has to choose between Q' and Q'' . Which relationship among areas implies that Al should choose Q' over Q'' ?
- “a” > “e”
 - “a” + “b” > “e”
 - “b” < “e” + “f”
 - “e” > “c”



- (5) Suppose that the market depicted in figure 3 has cleared. Which areas show the extent of consumer surplus (the consumers' gains from trade)?
- Areas “a” and “b”
 - Areas “b” and “d”
 - Areas “a” and “c”
 - Areas “a” and “c” less area “e”
- (6) Suppose that the market depicted in figure 3 has cleared. Which areas show the extent of firm profits (the industry's gains from trade)?
- Areas “a” and “b”

- b. Areas “b” and “d”
- c. Areas “a” and “d”
- d. Areas “a” and “d” less area “e”



Comparative Statics. Suppose that the markets depicted in figures 4 and 5 initially have demand curve D and supply curve S , and that the market has cleared—e.g. that equilibrium prices have emerged.

- (7) Suppose that the market depicted is the market for orange juice. What happens to the market for orange juice if an unexpected hard frost devastates the output of oranges in a regions of the world that is normally a major producer of oranges?
 - a. See figure 4, the equilibrium that emerges will be where D'' crosses S .
 - b. See figure 4, the equilibrium that emerges will be where D' crosses S .
 - c. See figure 5, the equilibrium that emerges will be where S'' crosses D .
 - d. See figure 5, the equilibrium that emerges will be where S' crosses D .

- (8) Suppose that the market depicted is the market for orange juice. What happens to the market for orange juice if an unexpected medical finding implies that drinking two glasses of orange juice a day reduces the probability of a heart attack by 50%?
 - a. See figure 4, the equilibrium that emerges will be where D'' crosses S .
 - b. See figure 4, the equilibrium that emerges will be where D' crosses S .
 - c. See figure 5, the equilibrium that emerges will be where S'' crosses D .
 - d. See figure 5, the equilibrium that emerges will be where S' crosses D .

- (9) Suppose that the market depicted is the market for gasoline-powered automobiles. What happens to the market for such automobiles if an unexpected discovery of oil causes the price of gasoline to fall by half?
- See figure 4, the equilibrium that emerges will be where D'' crosses S .
 - See figure 4, the equilibrium that emerges will be where D' crosses S .
 - See figure 5, the equilibrium that emerges will be where S'' crosses D .
 - See figure 5, the equilibrium that emerges will be where S' crosses D .
- (10) Suppose that the market depicted is the market for gasoline automobiles. What happens to the market for such automobiles if an unexpected new battery technology reduces the cost and increases the range of battery powered automobiles by 30%?
- See figure 4, the equilibrium that emerges will be where D'' crosses S .
 - See figure 4, the equilibrium that emerges will be where D' crosses S .
 - See figure 5, the equilibrium that emerges will be where S'' crosses D .
 - See figure 5, the equilibrium that emerges will be where S' crosses D .