ECON 107 Midterm 1, March 16, 2025

Closed notes and books. Turn off cell phones. No Questions. Keep your eyes on your exam. Show your work--answers without work will not get any credit. If a question requires an explanation, responses without reasoning will not receive credit.

Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Total
10	10	30	10	10	20	10	100

1. After the Russia-Ukraine war began, there was a sudden influx of Russians and Ukrainians into Antalya. How did this impact the rental apartment market in Antalya? Analyze this using supply and demand graphs. Illustrate the market equilibrium before and after the influx on your graph and explain your reasoning.

2. There are 10 consumers in a market each with a demand function given by $Q(P)=24-0.5P$. Find the market demand function and plot both the market demand curve and an individual consumer's demand curve on the same price-quantity graph.

3. Consider the market for bread. Assume there are no taxes or price controls initially. Market demand function is given by $Q_D(P)=12-0.5P$ and market supply function is given by $Q_S(P)=2P-8$ where Q denotes quantity (units) of bread and P denotes price per unit.
   a. Find market equilibrium price and quantity.

   b. Which one is more elastic at the equilibrium? Supply or demand?

   c. Suppose government imposes a unit tax on producers such that producers have to give 1 TL per unit tax to the government for each unit sold
      i. Find after tax equilibrium quantity total price consumers pay and net price producers receive.

      ii. Who bore more of the tax, consumers or producers? Why? Explain.

   d. Suppose government imposes a price ceiling of P=4TL/unit. Find <u>quantity traded</u> and <u>consumer surplus</u> at the price ceiling.

4. The Economist (February, 2025) states: “Businesses have scrambled to buy foreign goods ahead of the introduction of border levies (tariffs). America’s trade deficit in goods surged (increased) to $153bn in January, up from $92bn a year earlier. This buying frenzy is likely to continue for as long as the threat of still-higher tariffs looms.”. Which determinant (factor) of demand does the article refer to? How did this determinant affect consumer demand in America? Explain.

5. If a business earns zero economic profit, would it shut down and exit the market? Explain.

6. As we discussed in class, sales of cell-phones are taxed in Türkiye.

   a) Is this tax likely to be effective in generating tax revenue? Why or why not? Explain.

   b) How does this sales tax impact deadweight loss in this market? Do you expect this effect to be large or small? Explain.

7. Table below gives the production possibilities frontier (PPF) for Emir and Mete. Assume each person's PPF has constant slope.

	Emir		Mete	
	walnuts	olives	walnuts	olives
Use all times to produce walnuts	8 units	0 units	6 units	0 units
Use all times to produce olives	0 units	24 units	0 units	6 units

a) Who has comparative advantage in producing walnuts? Who has comparative advantage in producing olives?

b) Would you recommend specialization and trade to Emir and Mete neighbor? If so, what specialization and terms of trade (price) would you suggest and why? If not, explain your reasoning.