HS 3002 Principles of Economics

8-8.50 am Tutorial Exercise -1 15/02/2019

1) If the demand and supply curve for computers are: D = 100 - 6P, S = 28 + 3P, Where P is the price of computers, what is the quantity of computers bought and sold at equilibrium?

2) If coffee production in India is sharply reduced because of drought in the cofee-growing states, and consumers turn to tea as a substitute for coffee. How would you illustrate this change in the coffee market in supply-and-demand terms?

3) Given the following data: P = 80 - Q (Demand), P = 20 + 2Q (Supply). Suppose suppliers must pay a tax of Rs.6 per unit. Find the new (post-tax) equilibrium price and quantity and compare it with pre-tax equilibrium price and quantity.

4) From the data shown in the table about demand for smart phones, calculate the price elasticity of demand from: point B to point C, point D to point E, and point G to point H. Classify the elasticity at each point as elastic, inelastic, or unit elastic.

| **Points** | **P** | **Q** |
| --- | --- | --- |
| A | 60 | 3,000 |
| B | 70 | 2,800 |
| C | 80 | 2,600 |
| D | 90 | 2,400 |
| E | 100 | 2,200 |
| F | 110 | 2,000 |
| G | 120 | 1,800 |
| H | 130 | 1,600 |

5) Suppose a worker in the United States can produce 4 cars or 20 computers per month while a worker in Russia can produce 1 car or 5 computers per month. For simplicity, assume each country has only one worker.

a. Fill out the following table:

Cars Computers

USA

Russia

b. Are there any gains to be made from trade? Why?

c. Does your answer in (b) above help you pinpoint a source for gains from trade?

1. Consider public policy aimed at smoking.
2. Studies indicate that the price elasticity of demand  for cigarettes is about 0.4. If a pack of cigarettes currently costs $2 and the government wants to reduce smoking by 20 percent, by how much should it increase the price?
3. If the government permanently increases the price of cigarettes, will the policy have a larger effect on smoking one year from now or five years from now?

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