

Question: Demand and Supply

"Imagine you are a business analyst observing the market for coffee. Recent trends in consumer preferences and global coffee bean prices have led to interesting dynamics in the local coffee market. You are tasked with illustrating and analyzing how changes in the price of coffee affect the demand and supply, leading to situations of surplus and shortage. Use the information provided below to complete your task:

Initial Situation: The coffee market is initially in equilibrium, with an equilibrium price of \$5 per cup and an equilibrium quantity of 300 cups sold per day.

Scenario A - Price Increase: Due to a global increase in coffee bean prices, the local coffee shops decide to increase the price of a cup of coffee.

Scenario B - Price Decrease: Following a subsequent increase in supply of coffee beans thanks to a bumper harvest, the local coffee shops decide to decrease the price of a cup of coffee.

Tasks:

A. Create a Demand and Supply Graph:

- Draw a demand and supply graph for coffee in the local market.
- Label your axes (price on the vertical axis and quantity on the horizontal axis).
- Indicate the initial equilibrium point with the equilibrium price and quantity.

B. Illustrate the Effect of a Price Increase:

- On the same graph, show how an increase in price affects consumer demand, leading to a new equilibrium where the quantity demanded is less than the quantity supplied, creating a surplus.
- Label this new demand curve and the surplus area.

C. Illustrate the Effect of a Price Decrease:

- On a new graph show a decrease in price affects consumer demand, leading to a new equilibrium where the quantity demanded exceeds the quantity supplied, creating a shortage.
- Label this new demand curve and the shortage area.

D. Analysis:

- Briefly explain how the changes in price in Scenario A and Scenario B lead to a surplus and a shortage, respectively.
- Discuss the potential effects of these changes on consumer behavior and market dynamics."