

Unit 03

Exercise 04 - Calculating Market Shortage Due to Price Ceiling

State your student ID: _____

Objective: Apply demand and supply concepts to calculate the equilibrium price and quantity, and determine the size of the shortage caused by a government-imposed price ceiling.

Scenario: The market for a specific good in Country A is described by the following equations:

- Demand: $Q_d = 1000 - 50P$
- Supply: $Q_s = 200 + 30P$
- The government introduces a price ceiling at $P = 8$.

TASK: Calculate (show how did you calculate in the space provided) **the following:**

1. The equilibrium price and quantity.

$Q_e =$ _____ $P_e =$ _____

2. The quantity demanded and supplied at the price ceiling:

$Q_d =$ _____ $Q_s =$ _____

3. The size of the shortage by finding the difference between the quantity demanded and supplied.

Shortage = _____