Unit 13 - Week 10: Monopoly and Duopoly

Assignment 10

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2020-04-08, 23:56 IST.

1) Cournot duopolists Firm 1 and Firm 2 face inverse demand P = 24 - Q and each has a marginal cost of 6. Firm 2 reaps its production process, allowing to produce at marginal cost of 3 (while Firm 1 still has MC of 6). How does this affect Firm 1?

- Its output is unchanged, but its profits fall by 6.
- Its output and profits are unchanged.
- Its output drops by 1 and its profits fall by 11.

No, the answer is incorrect.
Score: 0

Accepted Answers:
Its output drops by 1 and its profits fall by 11.

2) Competing duopolists both have MC = 1 (and no fixed costs) and face inverse demand P = 2 - 2Q, where Q = q1 + q2 is the total output of both firms. What is Firm 2’s Cournot reaction function, q2(q1)?

- q2(q1) = (1 - q1)/3
- q2(q1) = (1 - 2q1)/3
- q2(q1) = (1 - q1)/2

No, the answer is incorrect.
Score: 0

Accepted Answers:
q2(q1) = (1 - q1)/2

3) The inverse demand function for diamonds is P = 1500 - 2Q. The market for diamonds consists of two firms, Shiny and Dull. Shiny’s cost function is c(q)=100q + 5,009 and Dull’s cost function is c(q)=p=10,000. Which of the following statements is true?

- Cournot equilibrium total output is 400: Stackelberg eq, total output is 400.
- Cournot equilibrium total output is 200: Stackelberg eq, total output is 200.
- Cournot equilibrium total output is 600: Stackelberg eq, total output is 400.

No, the answer is incorrect.
Score: 0

Accepted Answers:
Cournot equilibrium total output is 400: Stackelberg eq, total output is 400.

4) The Reliance Corporation (Firm R) uses Business-to-Business internet technology to set out before Tata Pvt. Ltd. (Firm T). This gives the Reliance Corporation "first-move" ability. The market demand for bricks is Q = 1000 - 10PH.

- Total output is Q = (q1+q2), where q1 is the output produced by Tata and q2 is the output produced by Reliance Corporation.

Score: 0

Accepted Answers:
400

5) Following question no. 4, does the "first-move" ability of the Reliance Corporation allow them to capture a larger market share?

- Yes
- No
- Cannot say

No, the answer is incorrect.
Score: 0

Accepted Answers:
Yes

6) A monopolist sells his product in two different markets with demand functions as: P1 = (25 - 2Q1) and P2 = (40 - 5Q2). The cost function is C = 2Q1 + 2Q2 + 20, where Q1 and Q2 are quantities sold in the two markets. How much will the monopolist sell in the two markets if she does not discriminate between them and what will be the market price?

- Q1 = 4, Q2 = 6, and P = 60
- Q1 = 6, Q2 = 4, and P = 40

Score: 0

Accepted Answers:
Q1 = 6, Q2 = 4, and P = 60

7) Consider the previous question (i.e. question number 6). Suppose monopolist discriminate between two markets, then how much will he sell in both markets and what will be the market price in those two markets?

- Q1 = 6, P1 = 50, Q2 = 4, and P2 = 100
- Q1 = 8, P1 = 40, Q2 = 5, and P2 = 80

Score: 0

Accepted Answers:
Q1 = 4, P1 = 50, Q2 = 4, and P2 = 100