



UJIAN AKHIR SEMESTER

Mata Kuliah : Ekonomi Manajerial
Dosen Pengasuh : Dr. Endang Syahrani, M.Si
Semester : Ganjil 204/2025
Tanggal : Mei 2025

1. Occidental Pacific University is a large private university in California that is known for its strong athletics program, especially in football. At the request of the dean of the College of Arts & Sciences, a professor from the economics department estimated a demand equation for student enrollment at the university

$$Q_x = 5,000 - 0.5P_x + 0.1I + 0.25P_y$$

where Q_x is the number of full-time students, P_x is the tuition charged per full-time student per semester, I is real gross domestic product (GDP) (\$ billions) and P_y is the tuition charged per full-time student per semester by Oriental Atlantic University in Maryland, Occidental Pacific's closest competitor on the grid iron.

- Suppose that full-time enrollment at Occidental is 4,000 students. If $I = \$7,500$ and $P_y = \$6,000$, how much tuition is Occidental charging its full-time students per semester?
- The administration is considering a \$750,000 promotional campaign to bolster admissions and tuition revenues. The economics professor believes that the promotional campaign will change the demand equation to

$$Q_x = 5,100 - 0.45P_x + 0.1I + 0.25P_y$$

If the professor is correct, what will Occidental's full-time enrollment be?

2. Yell-O Yew-Boats, Ltd. produces a popular brand of pointy birds called Blue Meanies. Consider the demand and supply equations for Blue Meanies:

$$Q_{Dx} = 150 - 2P_x + 0.01I + 1.5P_y$$

$$Q_{Sx} = 60 + 4P_x - 2.5W$$

where :

Q_x = monthly per-family consumption of Blue Meanies

P_x = price per unit of Blue Meanies

I = median annual per-family income = \$25,000

P_y = price per unit of Apple Bonkers = \$5.50

W = hourly per-worker wage rate = \$8.50

- What are the equilibrium price and quantity of Blue Meanies?
- Suppose that median per-family income increases by \$6,000.

What are the new equilibrium price and quantity of Blue Meanies?

- Suppose that in addition to the increase in median per-family income, collective bargaining by Blue Meanie Local resulted in a \$2.50 hourly increase in the wage rate. What are the new equilibrium price and quantity?

3. Suppose that a consumer's utility function is $U = 2Q_1^2 Q_2^2$.

If $P_1 = 5$, $P_2 = 10$, and the consumer's money income is $M = 2,000$, what are the optimal values of Q_1 and Q_2 ?