

科目：個體經濟學

適用：經濟系三

考生注意：

1. 依次序作答，只要標明題號，不必抄題。
2. 答案必須寫在答案卷上，否則不予計分。
3. 限用藍、黑色筆作答；試題須隨卷繳回。

本 試 題
共 3 頁
第 / 頁

編號：721

1. Please explain The Law of Demand. (10 Points)
2. Suppose that the demand curve is given by $D(p) = 10 - p$. What is the gross benefit from consuming 6 units of the good? (10 Points)
3. The inverse demand function for eggs is $p = 125 - 6q$, where q is the number of cases of eggs. The inverse supply is $p = 5 + 6q$. In the past eggs were not taxed but now a tax of 72 dollars per case has been introduced. What is the effect of the tax on the quantity of eggs supplied? (10 Points)
4. The U.S. currently imports about half of the petroleum that it uses. The rest of its needs are met by domestic production. Could the price of oil rise so much that the U.S. would be made better off? Explain your answer. (10 Points)
5. A consumer, who is initially lender, remains a lender even after a decline in interest rates. Is this consumer better off or worse off after the change in interest rates? (10 Points)

科目：個體經濟學

適用：經濟系三

考生注意：

1. 依次序作答，只要標明題號，不必抄題。
2. 答案必須寫在答案卷上，否則不予計分。
3. 限用藍、黑色筆作答；試題須隨卷繳回。

本 試 題

共 2 頁

第 1 頁

編號： 721

6. The interest rate will be 10% for one more year, but a year from now, it will fall to 5% and stay at 5% forever. What is the market value of an investment that is sure to pay \$220 a year forever, starting two years from today? (10 Points)
7. If the demand function for tickets to play is $q = 7500 - 75p$, at what price will total revenue be maximized? (10 Points)
8. Does the production function $f(x, y) = x + y$ have constant return to scale? (10 Points)
9. The production function is given by $F(L) = 6L^{2/3}$. Suppose that the cost per unit of labor is \$16 and the price of output is \$12. How many units of labor will the firm hire? (10 Points)
10. A monopolist sells in two markets. The demand curve for her product is given by $p_1 = 141 - 3x_1$ in the first market and $p_2 = 115 - 2x_2$, where x_i is the quantity sold in market i and p_i is the price charged in market i . She has a constant marginal cost of production, $c = 3$, and no fixed costs. She can charge different prices in two markets. What is the profit-maximization combination of quantities for this monopolist? (10 Points)