

科目：個體經濟學 適用：經濟所

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 1 頁
第 1 頁

編號：332

1. Yoram insists on consuming 4 times as much of y as he consumes of x (so he always has $y = 4x$). He will consume these goods in no other ratio. The price of x is 3 times the price of y . Yoram has an endowment of 20 x 's and 45 y 's which he can trade at the going prices. What is Yoram's gross demand for x ? (10%)
2. Liquor and cigarettes are popular subjects for excise taxation because their demand is thought to be highly inelastic. But is this really so? Both products often have harmful effects on the health of their users. Suppose that actual cost of buying a pint of whiskey or a carton of cigarettes is twice the purchase price when health costs are taken into account. How would this affect elasticity estimates for the two products? (10%)
3. Please use a diagram, containing the demand curve and supply curve, to evaluate the following statement: Even in long-run competitive equilibrium, there is no assurance that all sales will take place at prices equal to the opportunity costs of the goods sold. (10%)
4. Please define the term Pareto efficiency and give the reason for the inefficiency of monopoly. (10%)
5. What is the Walras' law? Suppose that the economy contains two goods. Please use the Walras' law to interpret the statement: If demand equals supply in one market, demand must also equal supply in the other market. (10%)
6. What are the differences between "Perfect Competition" and "Monopolistic Competition"? (10%)
7. A two-product firm faces the demand and cost functions below:
 $Q_1 = 30 - 2P_1 + P_2$, $Q_2 = 10 + P_1 - P_2$, $C = 2Q_1^2 + Q_2^2$.
 (a) Find the output levels that satisfy the first-order condition for maximum profit.
 (b) Check the second-order sufficient condition. Can you conclude that the problem possesses a unique absolute maximum? (20%)
8. Let the demand and supply functions for a commodity be $Q_d = D(P, Y_0)$ and $Q_s = S(P)$ where $\frac{\partial Q_d}{\partial P} < 0$, $\frac{\partial Q_s}{\partial P} > 0$, $\frac{\partial Q_d}{\partial Y_0} > 0$ (income Y_0 is an exogenous variable). All derivatives are continuous.
 (a) Does an increase in the income result in an increase in the equilibrium price?
 (b) The total equilibrium expenditure of the commodity, $E \equiv PD(P, Y_0)$, is a function of the exogenous variable Y_0 also. Assume the elasticity of demand, $-\frac{\partial Q_d}{\partial P} \cdot \frac{P}{Q_d}$, is less than one at equilibrium point. Does an increase in the income result in an increase in the equilibrium expenditure? (20%)