

### MCQs

MCQ1. The average home in Hong Kong is much smaller in size than in Australia. How is the difference related to land being more expensive in Hong Kong?

- (a) As land is more expensive, real estate developers build high-rise apartments;
- (b) As land is more expensive, real estate developers build smaller homes;
- (c) As land is more expensive, the price of housing is higher, so people buy smaller homes;
- (d) None of the above.

A: (c).

MCQ2. Fields can be ploughed with human labor, animal power, or fuel-burning machines. Explain how the choice among the methods of ploughing depends on worker wages.

- (a) Human ploughing is most intense in human effort and mechanized ploughing is least intense;
- (b) Human ploughing is optimal if wages are very low;
- (c) Mechanized ploughing is optimal if wages are very high;
- (d) All of the above.

A: (d).

MCQ3. Customers for prepaid mobile telephone service pay a lump sum price for a fixed quantity of usage. Customers for post-paid service enter into a contract that stipulates a monthly subscription charge and price per unit of usage. Customers of pre-paid service tend to consume and spend less than customers of post-paid mobile service. Fill in the blanks: \_\_\_\_\_ service is an inferior product and \_\_\_\_\_ service is a normal product.

- (a) Prepaid, Post-paid;
- (b) Post-paid, Prepaid;
- (c) Prepaid, Prepaid;
- (d) Post-paid, Post-paid.

A: (a).

MCQ4. Explain the relations among the demands for warehouse workers and stock-picking machines (machines to lift workers to access stocks at height).

- (a) Complements;
- (b) Substitutes;
- (c) No relation.

A: (a).

MCQ5. How would a switch from gasoline-powered to electric cars affect the demands for:  
(i) Spark plugs and (ii) Tires?

- (a) (i) Higher; (ii) Maybe higher (heavier vehicles + more driving);
- (b) (i) Lower; (ii) Maybe higher (heavier vehicles + more driving);
- (c) (i) Higher; (ii) Maybe lower (lighter vehicles + less driving);
- (d) (i) Lower; (ii) Maybe lower (lighter vehicles + less driving).

A: (b).

MCQ6. Tesla and NIO produce only electric cars. How would advertising by Tesla affect the demand for (i) electric cars in general, and (ii) NIO cars?

- (a) Reduce; Reduce;
- (b) Reduce; Increase;
- (c) Increase; Reduce;
- (d) Increase; Increase.

A: (c).

MCQ7. Suppose that a food delivery service cuts its commission. How would consumers respond and how would they benefit?

- (a) Consumers would order more food deliveries;
- (b) Consumers would benefit from the lower commission on orders that they would have placed before the cut in commission;
- (c) Consumers would benefit from the additional orders;
- (d) All of the above.

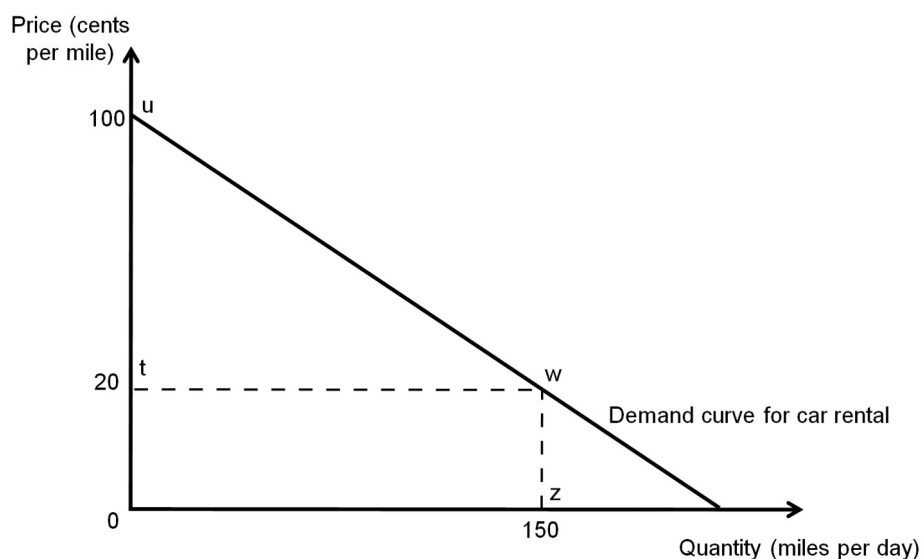
A: (d).

MCQ8. Luna Supplies offers to lease a plotter on a 12-month contract for a basic rental of \$500 per month plus a fee of \$10 per A1-sized plot. Consider a customer who prints 50 plots a month. What is their (i) average and (ii) marginal cost per plot?

- (a) (i) \$500; (ii) \$10;
- (b) (i) \$10; (ii) \$10;
- (c) (i) \$10; (ii) \$60;
- (d) None of the above.

A: (d).

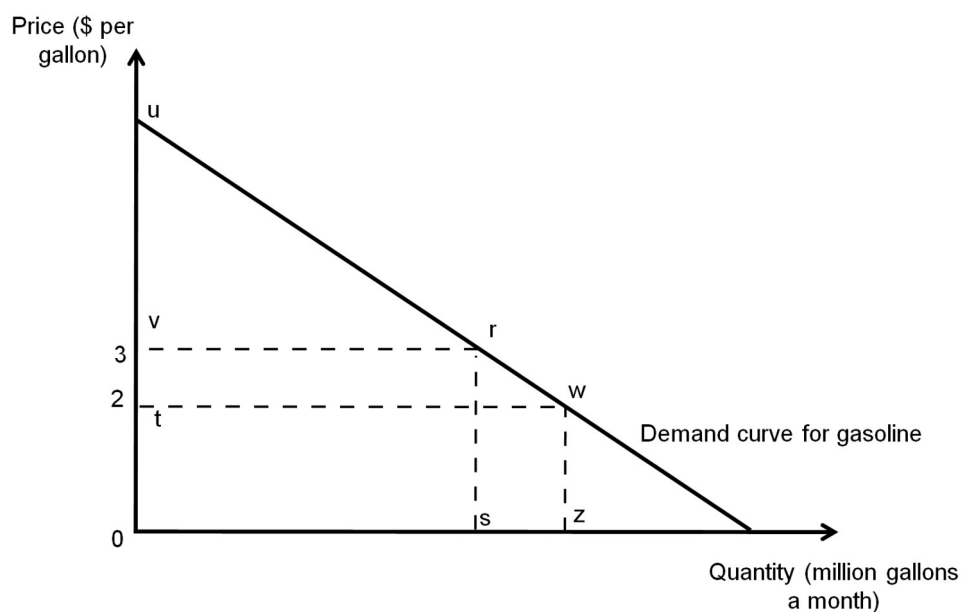
MCQ9. The below figure depicts Maggie's demand for car rental. Suppose that the car rental agency sets a two-part price including a usage fee of 20 cents per mile. How much can the agency charge for the fixed payment?



- (a) \$100;
- (b) \$60;
- (c) \$30;
- (d) None of the above.

A: (b).

MCQ10. The following figure depicts the market demand for gasoline. Suppose that the price of gasoline rises from US\$2 to US\$3 per gallon. Which areas represent the changes in (i) expenditure, and (ii) buyer surplus?



- (a) (i) Area 0zwt; (ii) Area twu.
- (b) (i) Area 0srv; (ii) Area vru.
- (c) (i) Area 0zwt minus area 0srv; (ii) Area twu minus area vru.
- (d) None of the above.

A: (c).

### Short questions

SQ1. The average home in Hong Kong is much smaller in size than in Australia. How is the difference related to land being more expensive in Hong Kong?

A: Land is a key input into housing. As land is more expensive, the price of housing is higher, so people buy smaller homes.

SQ2. Fields can be ploughed with human labor, animal power, or fuel-burning machines. Explain how the choice among the methods of ploughing depends on worker wages.

A: Human ploughing is most intense in human effort and mechanized ploughing is least intense. Human ploughing is optimal if wages are very low, and mechanized ploughing is optimal if wages are very high.

SQ3. Customers for prepaid mobile telephone service pay a lump-sum price for a fixed quantity of usage. Customers for post-paid service enter into a contract that stipulates a monthly subscription charge and price per unit of usage. Customers of prepaid service tend to consume and spend less than customers of post-paid mobile service. Apply the concepts of normal and inferior products to prepaid and post-paid service.

A: Lower income people buy prepaid service and higher income people buy post-paid service. Prepaid service is an inferior product. Post-paid service is a normal product.

SQ4. Explain the relations among the demands for electric cars, batteries, and charging stations.

A: Electric cars and batteries: Complements; Electric cars and charging stations: Complements; Batteries and charging stations: Possibly substitutes or complements.

SQ5. How would a switch from gasoline-powered to electric cars affect the demands for: (a) Gasoline; (b) Spark plugs; (c) Tires; (d) Car washes?

A: (a) Lower; (b) Lower; (c) Maybe higher (heavier vehicles + more driving); (d) No change.

SQ6. Tesla and NIO produce only electric cars. How would advertising by Tesla affect the demand for NIO cars?

A: Increase the demand for NIO by promoting the concept of electric cars; reduce the demand for NIO by persuading consumers to switch from NIO to Tesla.

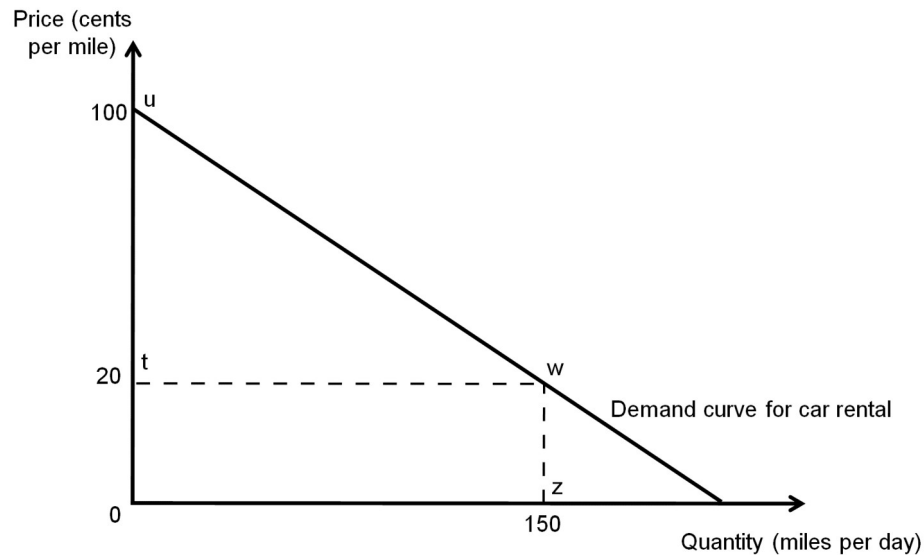
SQ7. Suppose that a food delivery service cuts its commission. How would consumers respond and how would they benefit?

A: Consumers would order more food deliveries. They would benefit in two ways: Lower commission on orders that they would have placed before the cut in commission, as well as the additional benefit from additional orders.

SQ8. Luna Supplies offers to lease a plotter on a 12-month contract for a basic rental of \$500 per month plus a fee of \$10 per A1-sized plot. (a) Explain this pricing strategy as a two-part price. (b) Consider a customer who prints 50 plots a month. What is their average and marginal cost per plot?

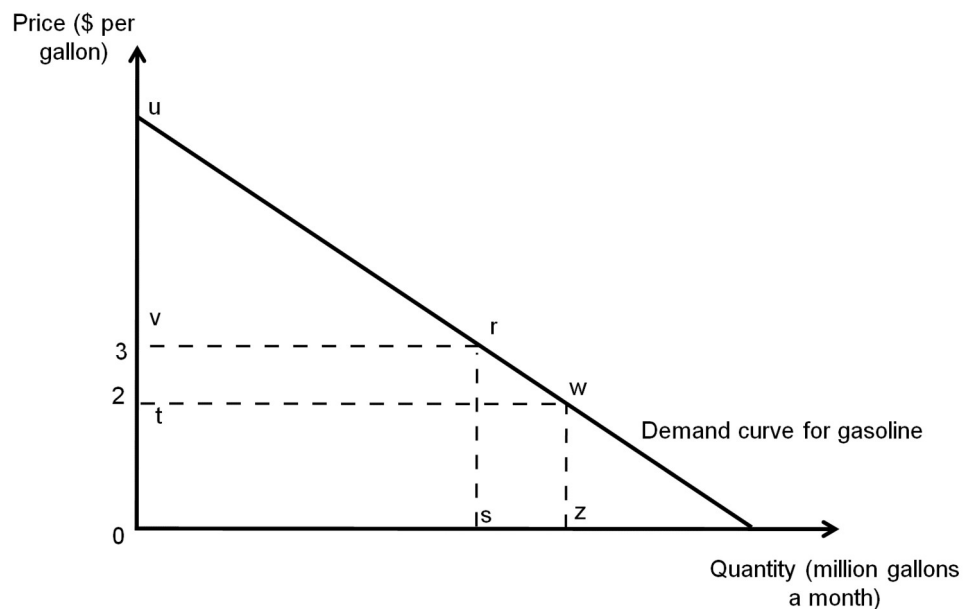
A: (a) The fixed payment is \$500 per month and the usage charge is \$10. (b) Average cost =  $(500 + 50 \times 10) \div 50 = \$60$  per plot; marginal cost = \$50 per plot.

SQ9. The below figure depicts Maggie's demand for car rental. Suppose that the car rental agency sets a two-part price including a usage fee of 20 cents per mile. How much can the agency charge for the fixed payment?



A:  $\frac{1}{2} \times (100 - 20) \times 150 = 6,000$  cents = \$60.

SQ10. The following figure depicts the market demand for gasoline. Suppose that the price of gasoline rises from US\$2 to US\$3 per gallon. Which areas represent the changes in (a) expenditure, and (b) buyer surplus?



A: (a) Area 0zwt minus area 0srv; (b) Area twu minus area vru.