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Level 1 Economics 2021

90986 Demonstrate understanding of how consumer, producer and/or government choices affect society, using market equilibrium

Credits: Five

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of how consumer, producer and/or government choices affect society, using market equilibrium.	Demonstrate in-depth understanding of how consumer, producer and/or government choices affect society, using market equilibrium.	Demonstrate comprehensive understanding of how consumer, producer and/or government choices affect society, using market equilibrium.

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should attempt ALL the questions in this booklet.

If you need more room for any answer, use the extra space provided at the back of this booklet. A spare grid is also provided.

Check that this booklet has pages 2–8 in the correct order and that none of these pages is blank.

Do not write in any cross-hatched area (///). This area may be cut off when the booklet is marked.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

QUESTION ONE: Market equilibrium

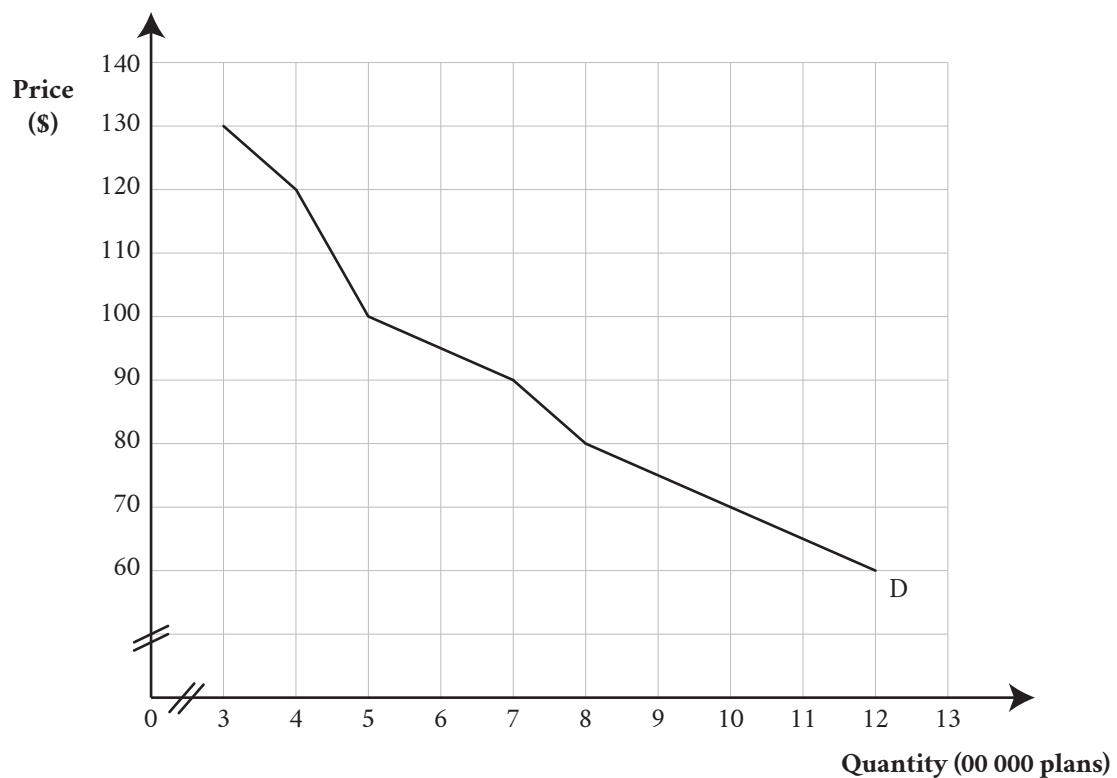
Fibre technology provides the fastest and most reliable internet connections in New Zealand. It is now the most popular internet option available.

- (a) (i) Using the information from the table, add the market supply curve to the graph, below.

New Zealand market for fibre broadband plans (monthly)

Price (\$)	Plans supplied (00 000)
60	6
70	7
80	8
90	9
100	10
120	11
130	12

New Zealand market for fibre broadband plans (monthly)



On the graph in (a):

- (ii) use dotted lines and labels to indicate the original market equilibrium price (P_E) and quantity (Q_E)
- (iii) use a solid line to show the market situation if the price for a monthly fibre broadband plan is \$100
- (iv) use dotted lines and label the quantity demanded at this price (Q_D)
- (v) use dotted lines and label the quantity supplied at this price (Q_S)
- (vi) label the resulting surplus or shortage.

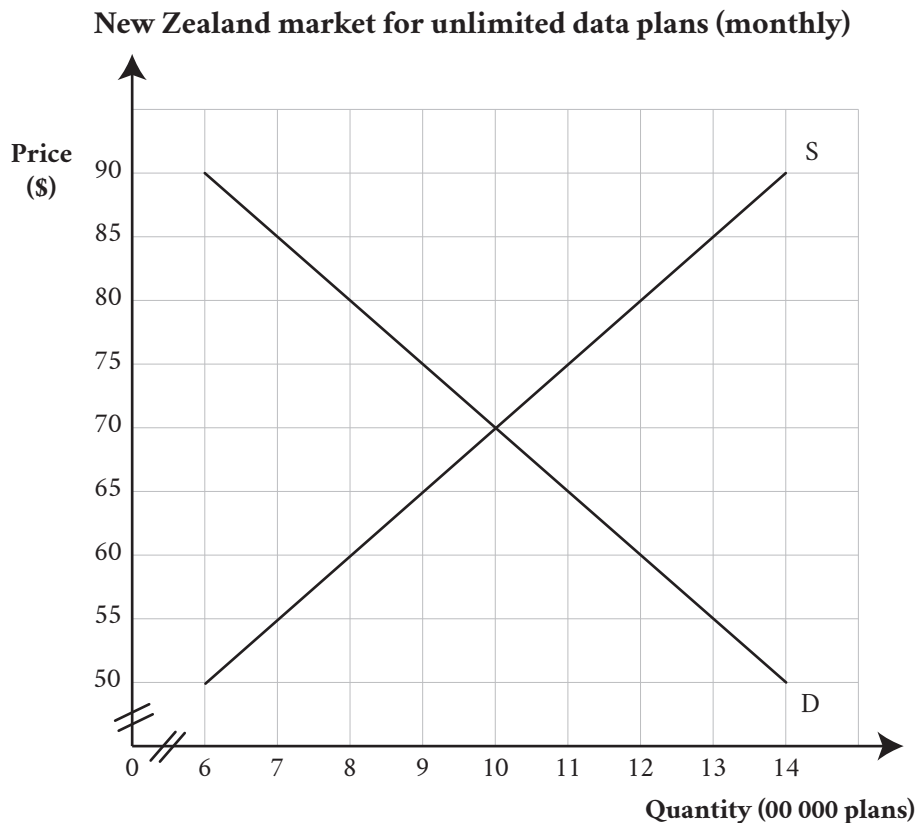
(b) Use the data from the graph, in part (a), to explain the resulting surplus or shortage.

(c) With reference to the graph in part (a), use figures to explain the changes needed to restore equilibrium. Identify the equilibrium in your answer.

QUESTION TWO: Subsidy

To make doing schoolwork at home easier (for distance learning or completing homework), the government could subsidise data plans so that more families can afford to have unlimited internet access.

- (a) On the graph, below, show the effect of a \$10 per month subsidy on unlimited data plans.
- Shift and label the appropriate curve.
 - Identify the original equilibrium (P_E , Q_E) using dotted lines and labels.
 - Show the new price and quantity using dotted lines, arrows, and labels (P_{E_1} , Q_{E_1}).



- (b) Identify and calculate:

	Before subsidy	After subsidy
(i) Quantity consumers buy	plans	plans
(ii) Price consumers pay	\$	\$
(iii) Total consumer spending	\$	\$
(iv) Price producers receive	\$	\$
(v) Total producer revenue	\$	\$
(vi) Total paid by government		\$

- (c) How will a subsidy on unlimited data plans change the price for **consumers** and affect consumer spending? Use the graph on page 4, and your calculations from (b).

- (d) How will a subsidy on unlimited data plans change the price received by **producers** and affect producer revenue? Use the graph on page 4, and your calculations from (b).

- (e) Is providing this subsidy an effective government intervention? Explain your answer.

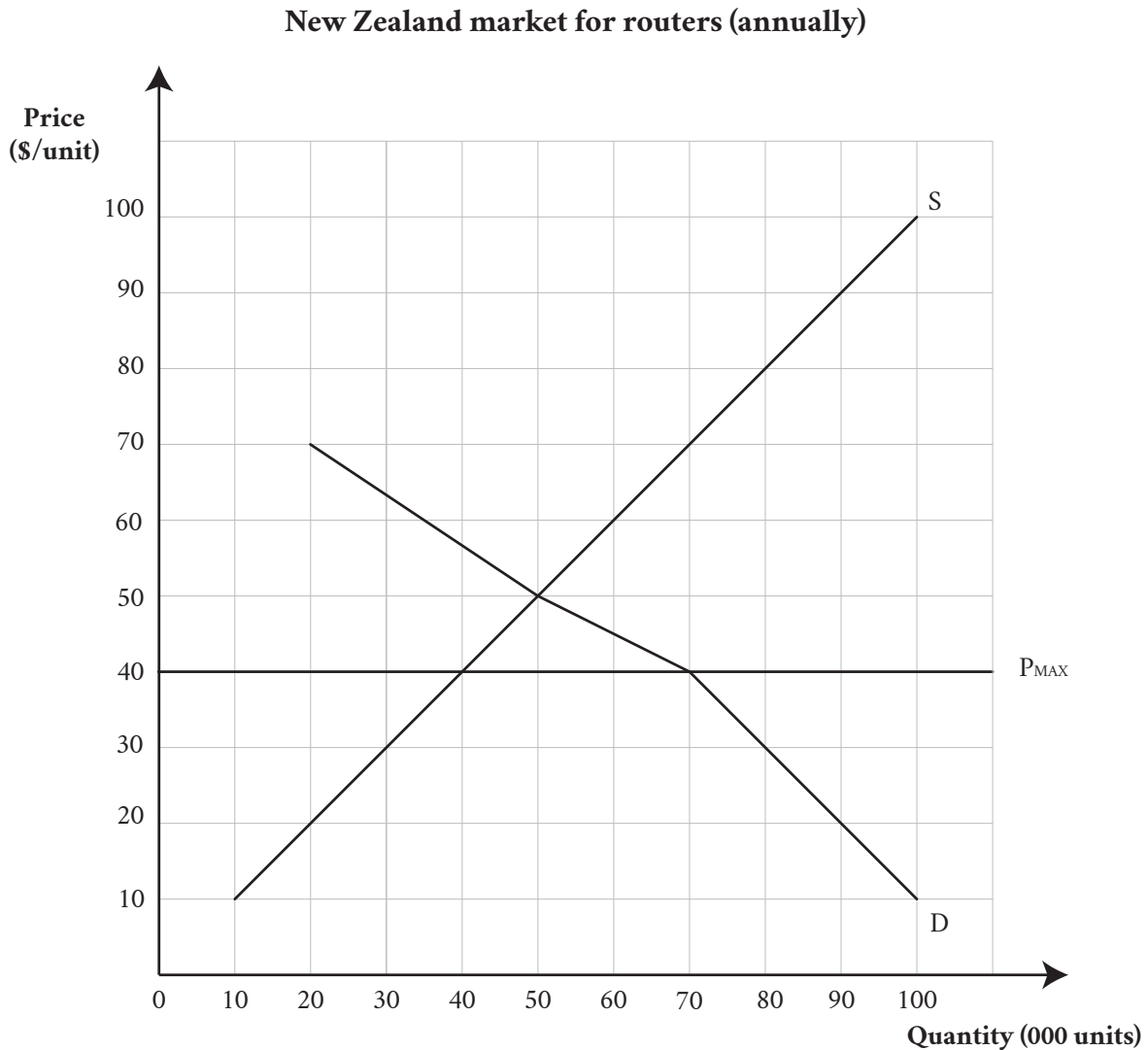
- (f) Explain TWO possible flow-on effects for society as a result of the subsidy.

(1) _____

(2) _____

QUESTION THREE: Maximum price

To set up a fibre broadband internet connection in your home, you need a device called a router. The government has set a maximum price on routers. The graph below shows the effect of a maximum price of \$40 (per unit) on the market for routers.



- (a) On the graph above, show the changes to quantity demanded and quantity supplied of routers as a result of the maximum price. In your answer:
- (i) use dotted lines to show the equilibrium price and quantity before the maximum price (label as P_E and Q_E)
 - (ii) use dotted lines to show the new quantity demanded by consumers after the maximum price (label as Q_D)
 - (iii) use dotted lines to show the new quantity supplied by router suppliers after the maximum price (label as Q_S)
 - (iv) fully label the resulting surplus or shortage.

(b) What is the economic relationship between routers and fibre broadband connections?

(c) Using the graph on page 6, explain what a maximum price is and how it has affected the price of routers.

(d) What happens to the quantity demanded for routers when the maximum price is imposed? Use data from the graph on page 6 in your answer.

(e) Explain the effect of the Price Maximum on consumer spending on routers. Use your data from the graph on page 6 in your answer.

**Extra space if required.
Write the question number(s) if applicable.**

QUESTION
NUMBER

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