NZQA

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Level 3 Economics 2021

91399 Demonstrate understanding of the efficiency of market equilibrium

Credits: Four

Achievement	**Achievement with Merit**	**Achievement with Excellence**
Demonstrate understanding of the efficiency of market equilibrium.	Demonstrate in-depth understanding of the efficiency of market equilibrium.	Demonstrate comprehensive understanding of the efficiency of 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.

Check that this booklet has pages 2–12 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: Impact of a subsidy

Warmer Kiwi Homes is a four-year government programme offering grants covering a significant portion of the cost of insulation and heating for low-income homeowners.

(a) On Graph One, below, show the price the home insulation and heating producers receive after the subsidy. Label this price P_2.

(b) On Graph One, clearly shade and label:

    (i)   the change in consumer surplus

    (ii)   the change in producer surplus

    (iii) the deadweight loss (if any).

Graph One: The New Zealand low-income homeowners' market for home insulation and heating with a subsidy (assuming elastic demand)
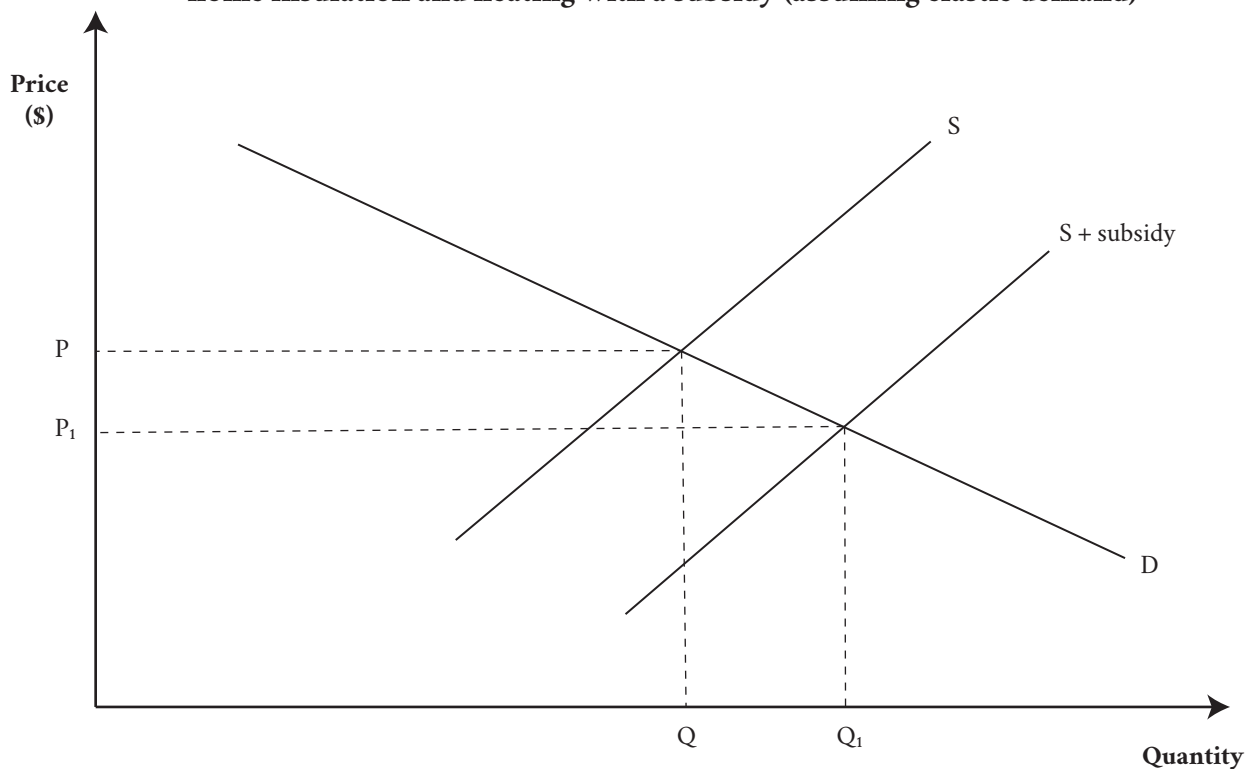
(c) How will the subsidy impact allocative efficiency in the New Zealand home insulation and heating market? Explain in detail.

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(d) Compare and contrast the impact of the home insulation and heating subsidy on consumers and producers. Refer to Graph One and explain:

(i) How does the subsidy impact consumer surplus?

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(ii) How does the subsidy impact producer surplus?

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(iii) Why might the price elasticity of demand for heating and home insulation for some low-income homeowners be elastic? Give two reasons.

(1) _____

_____
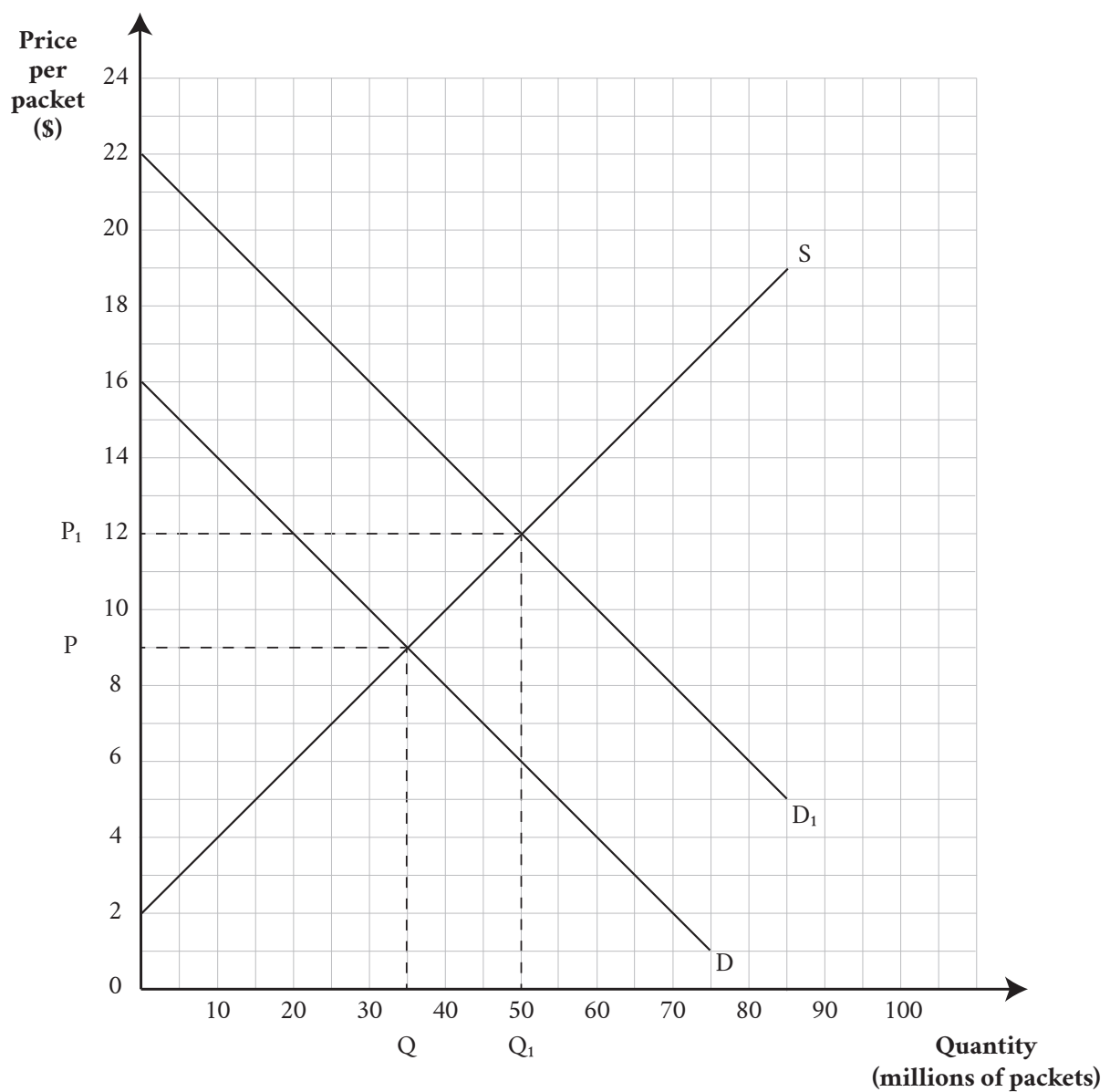
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(2) _____

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(iv) What is the effectiveness of the subsidy in significantly increasing the number of low-income homeowners who have home insulation and heating? Assume these homeowners have elastic demand.

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QUESTION TWO: Impact of a maximum price control

New Zealand currently does not use price controls for medication. However, in many other countries governments regulate how much a medication can cost. For example, Canada's Patented Medicine Prices Review Board requires that a new medication cannot cost more than the median price of the drug in other countries. Countries in the European Union use similar pricing constraints.

Source (adapted): https://www.goodrx.com/blog/why-are-prescription-drugs-more-expensive-in-the-us-than-in-other-countries/

Graph Two: The New Zealand market for a medication after an increase in demand

(a) How would an increase in demand for this medication result in a higher equilibrium price and quantity? Refer to the relevant numbers from Graph Two and the concept of market forces in your detailed explanation.

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If the Government is concerned that increases in demand would make the price for this medication unaffordable for some consumers, then they could impose a maximum price control of $9 per packet.

(b)   On Graph Three, show a maximum price control of $9 per packet. Label the price P~MAX~.

Graph Three: The New Zealand market for a medication
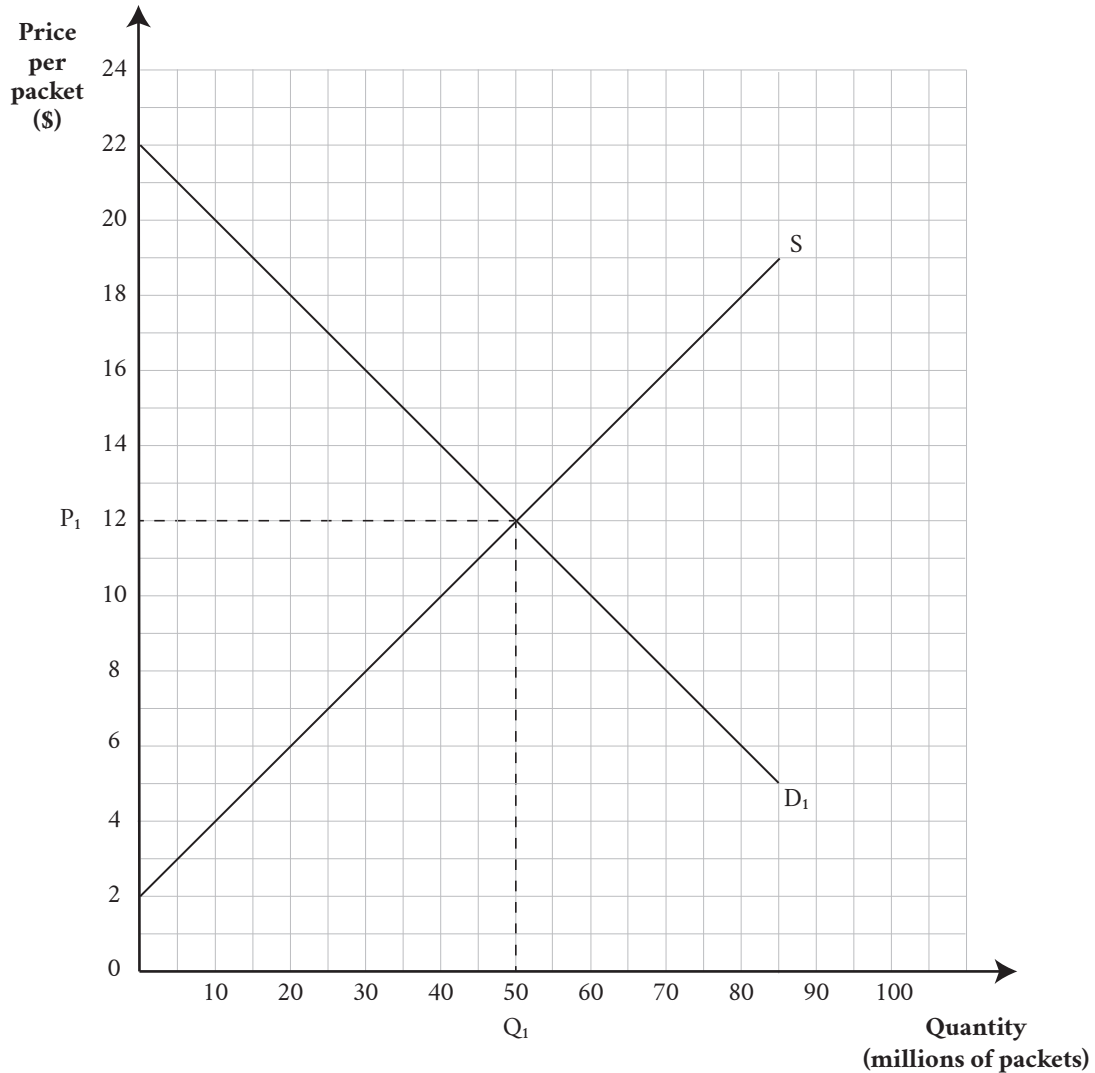
(c)   Complete Table One, below:

Table One

	Value from Graph Three (specify increase or decrease)
Change in consumer surplus	
Change in producer surplus	
Deadweight loss	

(d) Compare and contrast the impacts of this price control on consumers, producers, and allocative efficiency. Refer to Graph Three and Table One, and explain:

(i) How does the $9 per packet maximum price control impact consumer surplus?

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(ii) How does the $9 per packet maximum price control impact producer surplus?

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(iii) How does the $9 per packet maximum price control impact allocative efficiency?

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QUESTION THREE: Impact of an indirect tax and a minimum price control

Indirect taxes and minimum price controls are two policies the Government could use to reduce the consumption of harmful goods.

Graph Four: A market for a harmful good with an indirect tax
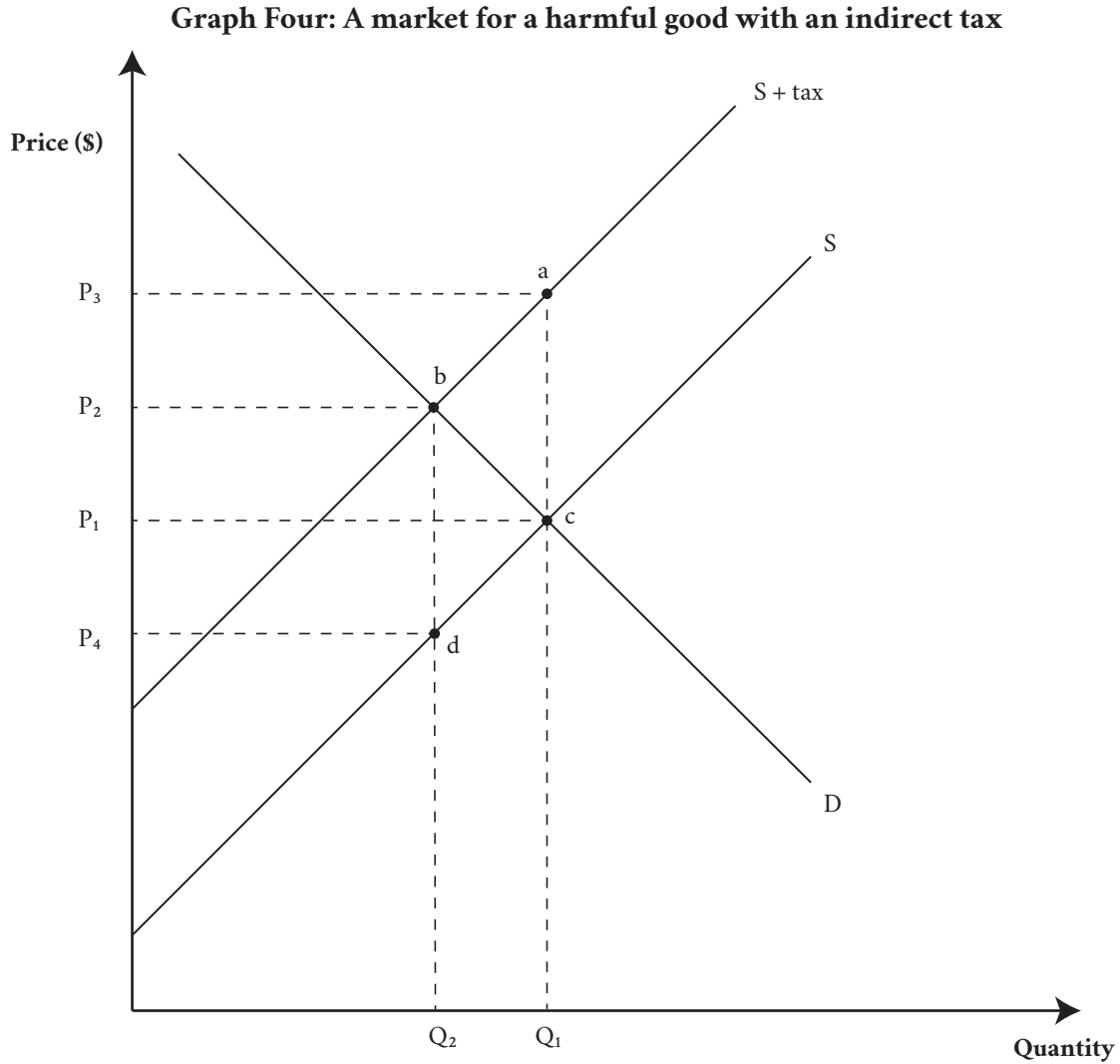
(a)   Use the labels from Graph Four to identify:

(i)   the change in consumer surplus _____

(ii)   the change in producer surplus _____

(iii)   the total tax revenue collected by the Government _____

(iv)   the deadweight loss _____

Graph Five: A market for a harmful good with a minimum price control
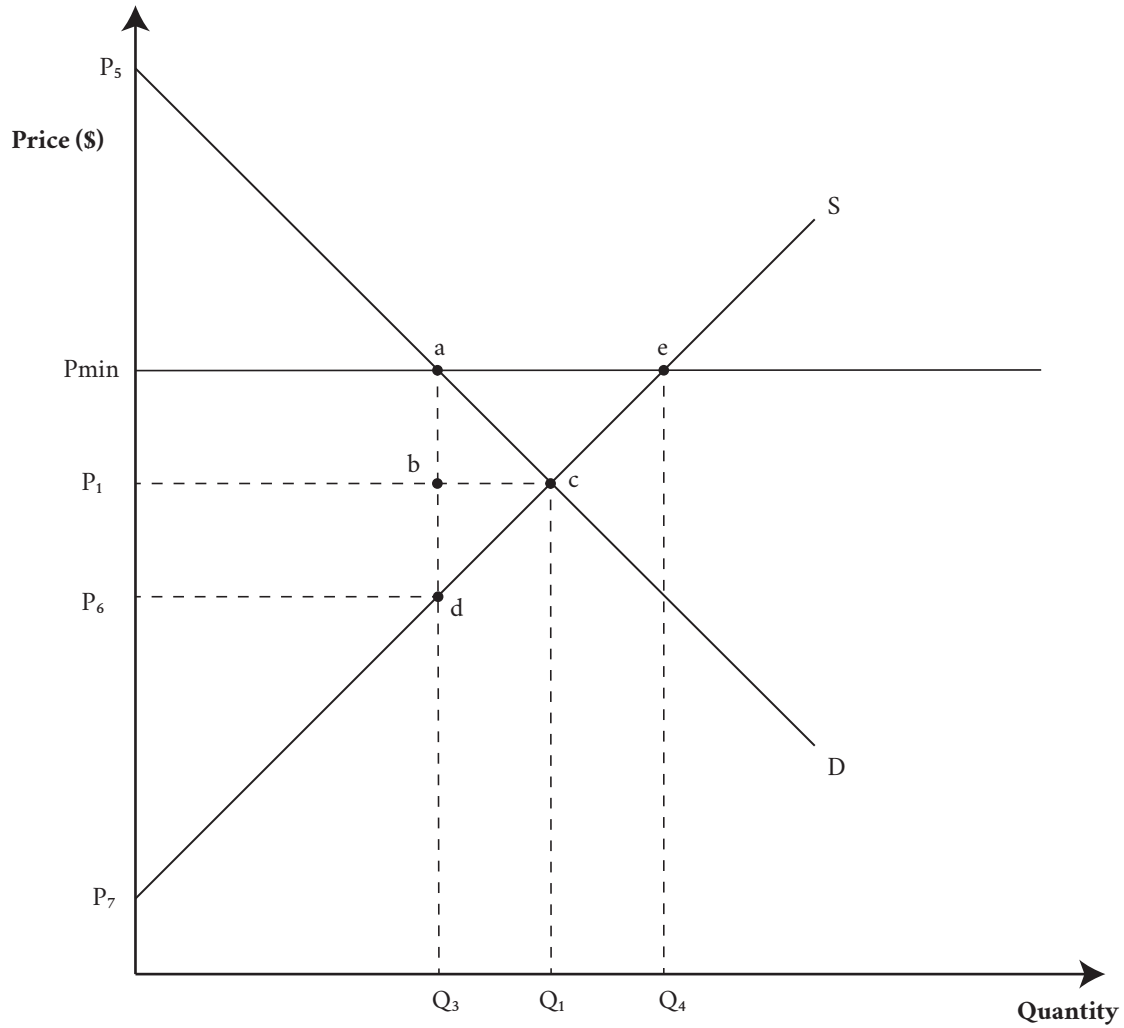
(b)   Use the labels from Graph Five to identify:

(i)   the consumer surplus after the minimum price _____

(ii)   the producer surplus after the minimum price _____

(iii) the deadweight loss _____

(c)   Compare and contrast the impacts of an indirect tax and a minimum price control on the market for a harmful good. Refer to Graph Four and Graph Five, and explain:

(i)   How would both policies impact consumer surplus?

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(ii) How would both policies impact allocative efficiency?

(iii) Which of the two policies would be less beneficial for producers? Why?

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

QUESTION NUMBER	

QUESTION
NUMBER

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