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91399



# Level 3 Economics, 2015

# 91399 Demonstrate understanding of the efficiency of market equilibrium

2.00 p.m. Wednesday 18 November 2015 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 2–11 in the correct order and that none of these pages is blank.

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

TOTAL

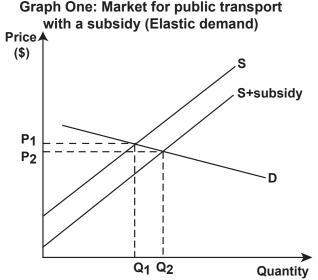
#### QUESTION ONE: IMPACT OF A SUBSIDY

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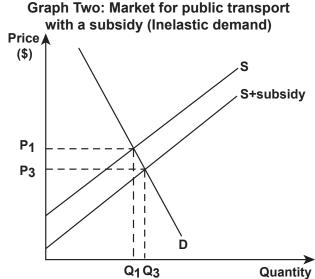
"Increasing congestion on urban roads presents a serious threat to the economic growth and liveability of our city regions."

Source: http://www.transportworks.org/about-transport-works/reducing-congestion

One possible policy to reduce traffic congestion is to increase subsidies on public transport. The effectiveness of this policy is determined by the price elasticity of demand for public transport.



(ii)



- (a) (i) On Graph One, clearly shade and label the following:
  - the change in consumer surplus as a result of the subsidy
  - the change in producer surplus as a result of the subsidy.

n your answer, ref			·

(b)	Compare and contrast the impact of subsidies on public transport when demand is elastic with when demand is inelastic. In your answer:						
	•	on BOTH graphs show the loss of allocative efficiency (deadweight loss) as a result of the subsidy					
	•	explain in detail, for Graph One, why there is a loss of allocative efficiency					
	•	explain in detail whether subsidies on public transport will be more effective in reducing traffic congestion if demand is elastic or inelastic					
	•	refer to Graph One and Graph Two.					

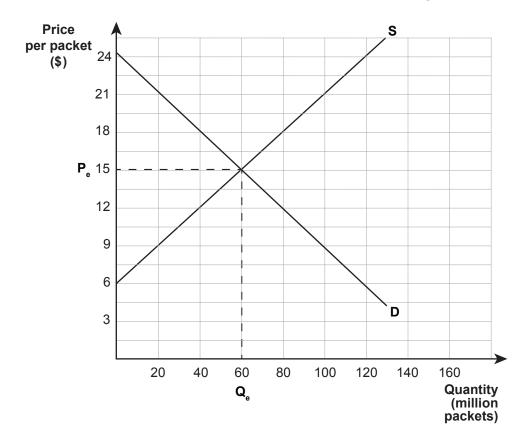
### QUESTION TWO: GOVERNMENT INTERVENTION AND EFFICIENCY OF THE MARKET

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Smokers thinking about making a new year resolution to quit smoking have been given some extra motivation with a tax increase that will significantly increase the average price of a pack of cigarettes.

Source (adapted): http://www.stuff.co.nz/national/politics/9569478/Cigarette-taxes-jump-10-per-cent

# Graph Three: New Zealand market for a packet of cigarettes



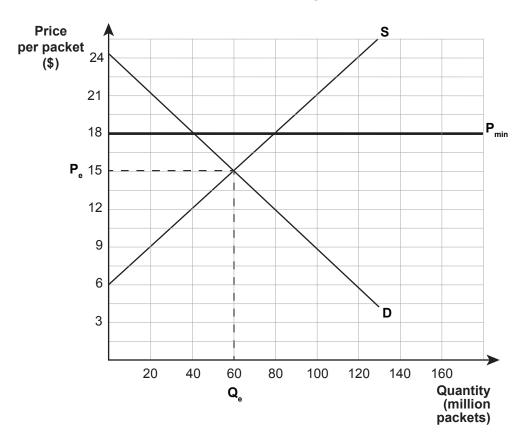
- (a) (i) On Graph Three, show an indirect tax which results in a price of \$18 for a packet of cigarettes.
  - (ii) Complete Table One by calculating the relevant values from Graph Three.

## **Table One**

	Value from Graph Three (\$)
Change in consumer surplus	
Change in producer surplus	
Tax revenue for the Government	

Another policy which would increase the price of cigarettes to \$18 is imposing a minimum price of \$18.

# Graph Four: New Zealand market for a packet of cigarettes with a minimum price of \$18



(b) Complete Table Two by calculating the relevant values from Graph Four.

**Table Two** 

	Value from Graph Four (\$)
Change in consumer surplus	
Change in producer surplus	
Change in consumer spending	

- (c) Compare and contrast the two policies an indirect tax and a minimum price. In your answer:
  - explain in detail the impact on consumer surplus of each of the two policies
  - explain in detail the impact on producer surplus of each of the two policies
  - explain in detail the impact on the Government of each of the two policies
  - use relevant calculations from Table One and Table Two and refer to Graph Three and Graph Four.

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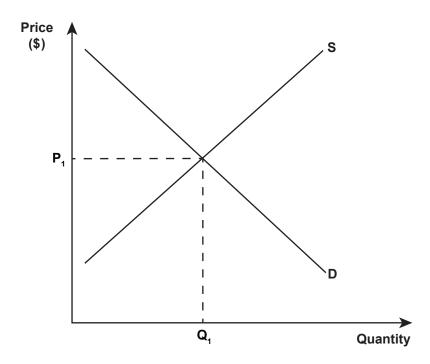
#### QUESTION THREE: GOVERNMENT INTERVENTION IN THE HOUSING MARKET

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Tariffs on most building materials will be suspended in a move the Government says will bring the average cost of building a house down by about \$3500.

Source (adapted): http://www.stuff.co.nz/business/budget-2014/10048621/Building-material-import-tax-held

# **Graph Five: The New Zealand housing market**



(a)	(i)	On Graph Five, show the impact on the New Zealand housing market if there is a
		reduction in the cost of building houses. Clearly label the new equilibrium price (P2) and
		quantity ( <b>Q</b> <sub>2</sub> ).

(ii)

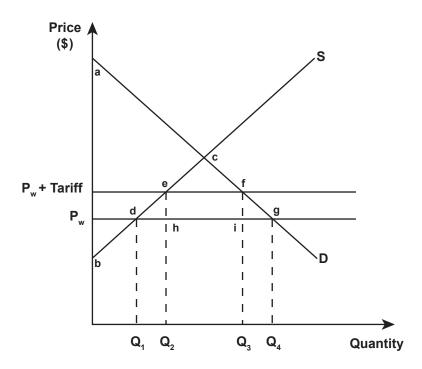
Explain in detail, using market forces, the change in the market equilibrium. In your answer, refer to Graph Five.				

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However, Finance Minister Bill English said the cuts to tariffs on building materials were only temporary and would need to be reintroduced due to the technicalities in the legislation.

Source (adapted): http://www.stuff.co.nz/business/budget-2014/10048621/Building-material-import-tax-held

Graph Six: New Zealand market for building materials with a tariff



(b) Complete Table Three below.

**Table Three** 

	Labels from Graph Six
Change in consumer surplus	
Change in producer surplus	
Tariff revenue for the Government	
Deadweight loss	

- (c) Compare and contrast the impact of the tariff on consumers and producers of building materials, the Government, and allocative efficiency. In your answer:
  - explain in detail the impact on consumer surplus and producer surplus
  - explain in detail the impact on the Government
  - explain in detail the impact on allocative efficiency
  - refer to Graph Six and Table Three.

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