

# 3

91399



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## Level 3 Economics, 2019

### 91399 Demonstrate understanding of the efficiency of market equilibrium

2.00 p.m. Monday 18 November 2019  
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.**

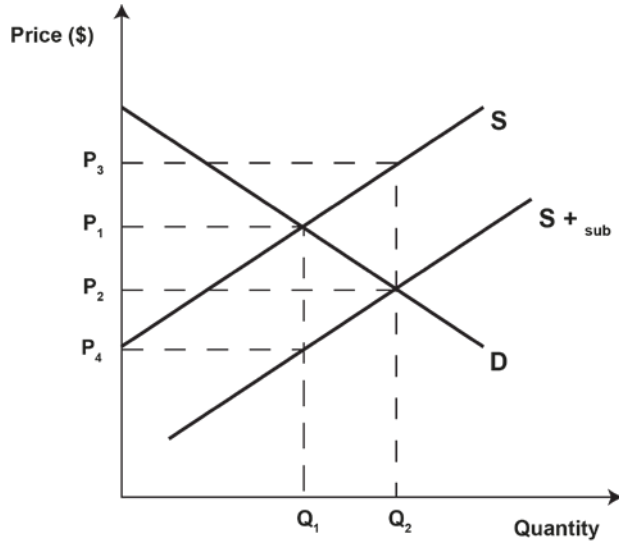
**TOTAL**

ASSESSOR'S USE ONLY

**QUESTION ONE: IMPACT OF A SUBSIDY AND MAXIMUM PRICE CONTROL**

Two policy options for the government, if it wishes to make a beneficial good or service more affordable for consumers and therefore increase consumption, are a subsidy and a maximum price control.

**Graph One: A market for a beneficial good with a subsidy**



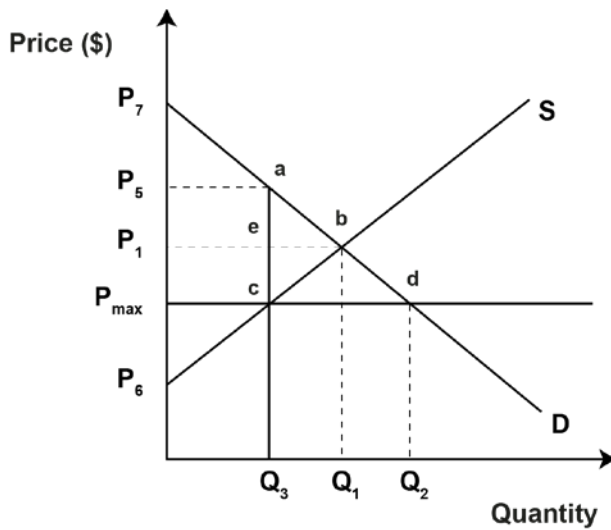
(a) On Graph One, above, complete the following:

Shade in the change in consumer surplus. Shade in the deadweight loss.

Shade in the change in producer surplus.

Label the total cost of the subsidy to the government using the letters A, B, C and D.

**Graph Two: A market for a beneficial good with a maximum price control**



(b) Use the labels from Graph Two, above, to identify:

(i) the consumer surplus after the maximum price \_\_\_\_\_

(ii) the change in producer surplus \_\_\_\_\_

(iii) the deadweight loss \_\_\_\_\_





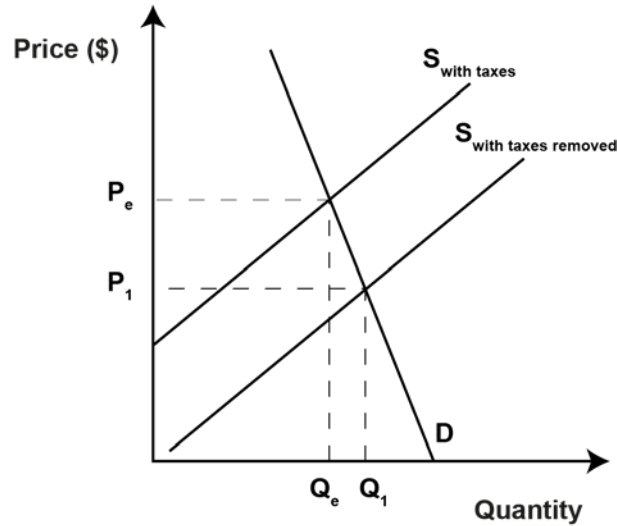


... 67.13 cents a litre is collected by the government in fixed excise taxes (excluding GST). In addition, a GST of 15% is collected on the overall price of fuel ...

Source (adapted): <https://z.co.nz/motorists/fuel-pricing/>.

Reducing or removing the taxes on petrol would significantly lower its price and make it more affordable for consumers.

**Graph Four: The New Zealand market for petrol with and without indirect taxes**



- (b) Compare and contrast the impact of removing petrol taxes on consumers, producers and allocative efficiency. In your answer:
- clearly shade and label the change in consumer surplus AND the change in producer surplus on Graph Four
  - explain in detail, with reference to Graph Four, the impact of removing petrol taxes on consumer surplus and producer surplus
  - explain in detail, referring to Graph Four, the impact of removing petrol taxes on allocative efficiency.

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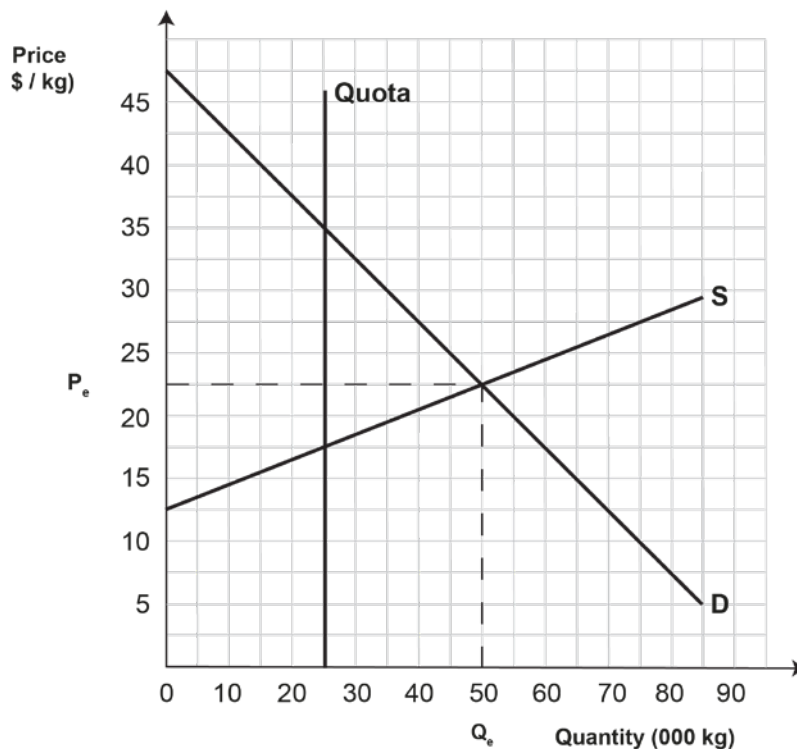


**QUESTION THREE: IMPACT OF QUOTA**

An important part of New Zealand fisheries management is the Quota Management System (QMS). Under the QMS, a yearly catch limit (i.e. the total allowable catch) is set for every fish stock (i.e. a species of fish, shellfish or seaweed from a particular area). By controlling the amount of fish taken from each stock, the QMS helps keep New Zealand's fisheries sustainable.

Source (adapted): <https://www.mpi.govt.nz/law-and-policy/legal-overviews/fisheries/quota-management-system/>.

**Graph Five: The New Zealand market for a species of fish with a quota (yearly catch limit)**



(a) Complete Table One below:

**Table One:**

	Space for working (if needed)	Value from Graph Five (\$)
Change in consumer surplus after a quota of 25 000 kg is introduced.		
Change in producer surplus after a quota of 25 000 kg is introduced.		
Deadweight loss after a quota of 25 000 kg is introduced.		









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