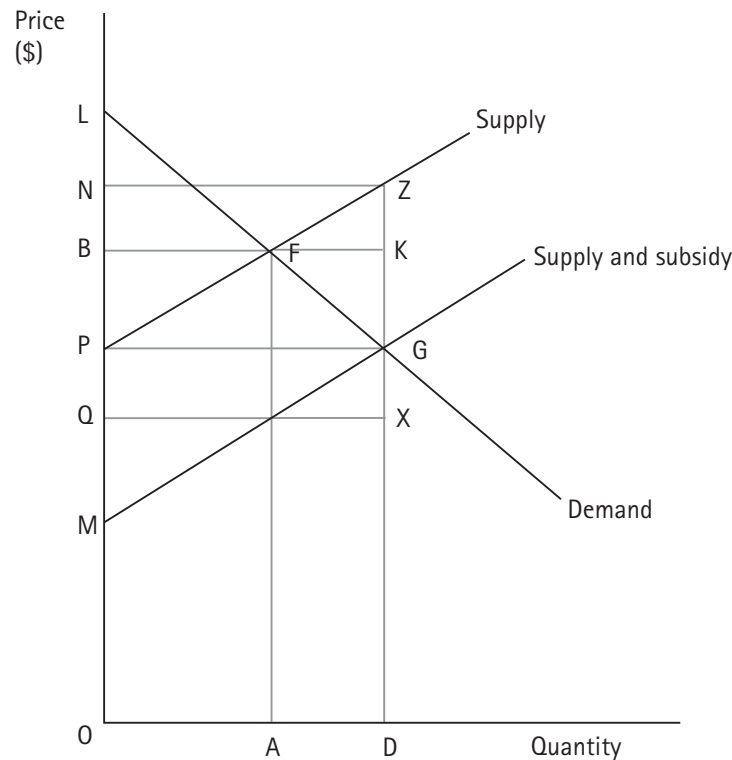




eLearneconomics: Subsidy incidence (1)

Student response _____

(a) Use the diagram to answer the questions that follow in the table.



Give letters to represent the following	Letter answer
(i) Price paid consumer before	
(ii) Price paid consumer after	
(iii) Consumer spending before	
(iv) Consumer spending after	
(v) Consumer surplus before	
(vi) Consumer surplus after	
(vii) Gain in consumer surplus	
(viii) Producer surplus before	
(ix) Producer surplus after	
(x) Producer revenue before	
(xi) Producer revenue after	
(xii) Cost to government of the subsidy	
(xiii) Deadweight loss of the subsidy	

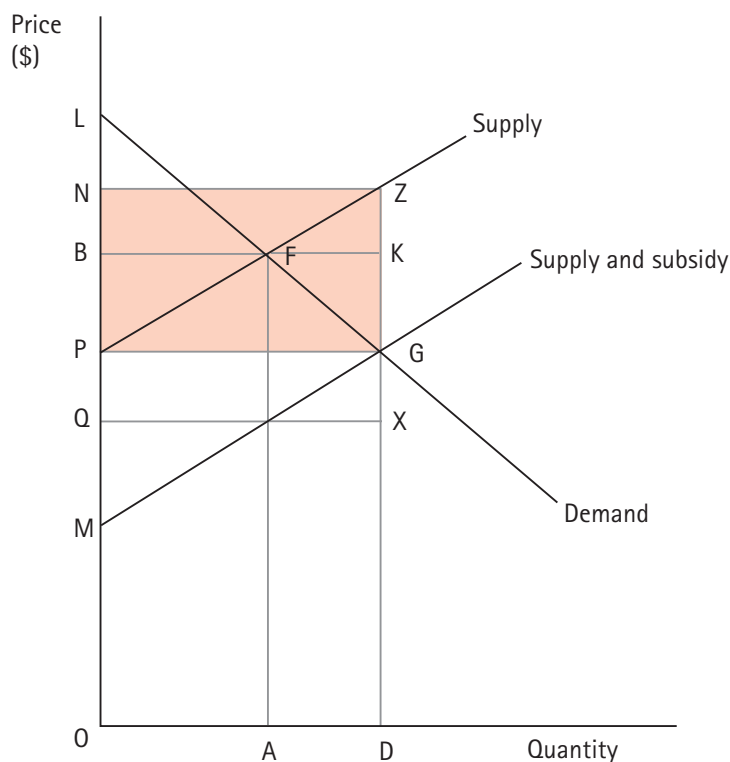
(b) What do the parallel lines indicate?

(c) Shade in the area of the cost to the government of the subsidy.



Solutions

(a) Use the diagram to answer the questions that follow in the table.



Give letters to represent the following	Letter answer
(i) Price paid consumer before	OB
(ii) Price paid consumer after	OP
(iii) Consumer spending before	BOAF
(iv) Consumer spending after	PODG
(v) Consumer surplus before	FBL
(vi) Consumer surplus after	PLG
(vii) Gain in consumer surplus	PGFB
(viii) Producer surplus before	FBP
(ix) Producer surplus after	PMG
(x) Producer revenue before	BOAF
(xi) Producer revenue after	NODZ
(xii) Cost to government of the subsidy	PGZN
(xiii) Deadweight loss of the subsidy	FZG

(b) What do the parallel lines indicate?

A per unit subsidy.

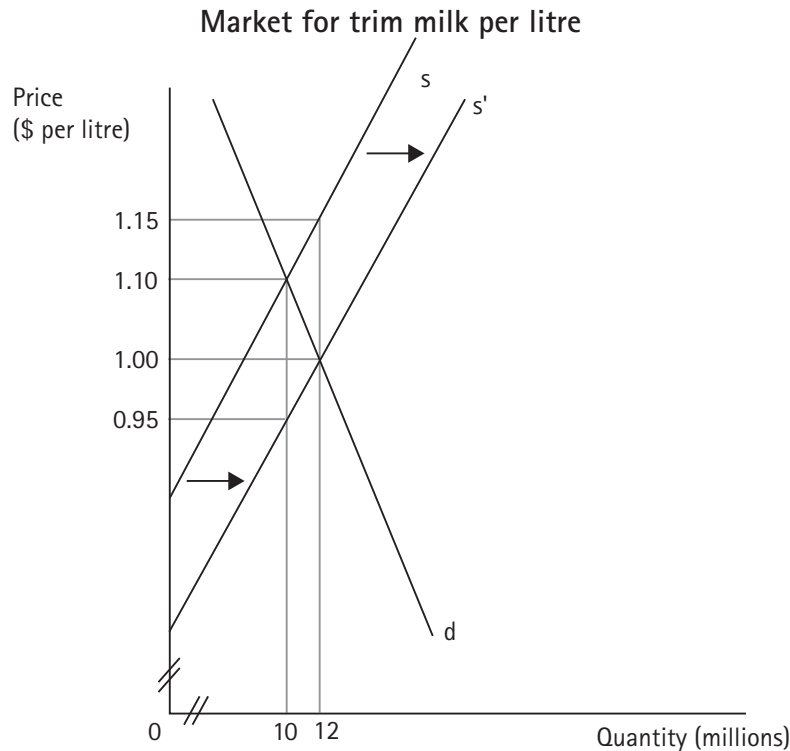
(c) Shade in the area of the cost to the government of the subsidy.



eLearneconomics: Subsidy incidence (2)

Student response _____

(a) Use the diagram below to answer the questions that follow.



Question	Working and answer
(i) What is the price paid by the consumer before the subsidy?	
(ii) What is the subsidised price of trim milk to the consumer?	
(iii) What is the subsidy per litre on trim milk?	
(iv) What is the total cost to the government of the subsidy?	
(v) What is the producer's revenue before the subsidy?	
(vi) What is the producer's income after the subsidy?	
(vii) How much better off in terms of revenue is the producer?	

(b) (i) Shade in the area on the diagram which represents the welfare (deadweight) loss brought about by the subsidy, and explain why this has come about.

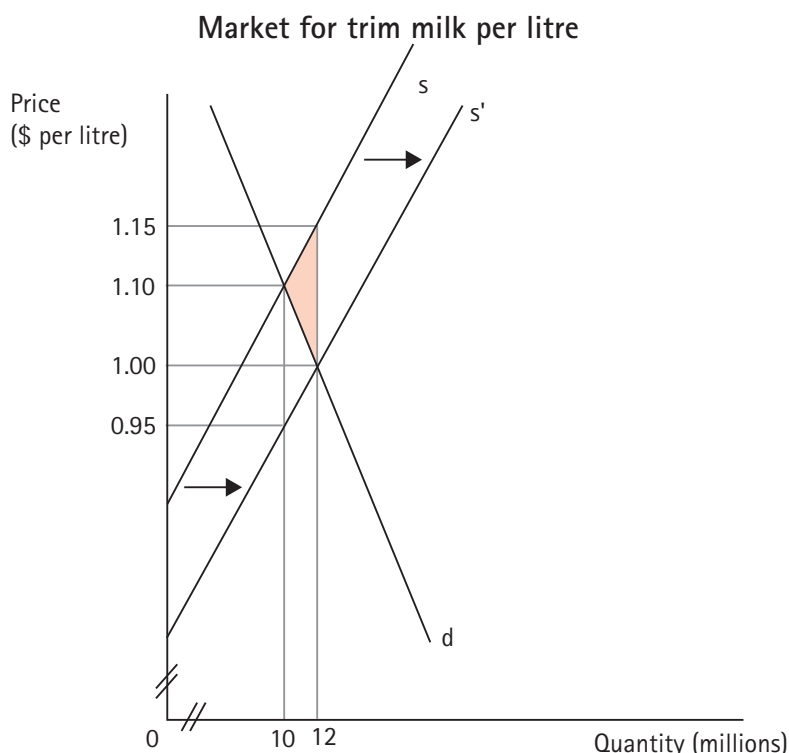
(ii) Work out the value of the deadweight loss created by the subsidy. Show your working.

eLearneconomics: Subsidy incidence (2a)



Solutions

(a) Use the diagram below to answer the questions that follow.



Question	Working and answer
(i) What is the price paid by the consumer before the subsidy?	$P = \$1.10$ per litre
(ii) What is the subsidised price of trim milk to the consumer?	$P' = \$1.00$ per litre
(iii) What is the subsidy per litre on trim milk?	\$0.15 per litre
(iv) What is the total cost to the government of the subsidy?	subsidy \times Q' $0.15 \times 12\text{m} = \1.8m
(v) What is the producer's revenue before the subsidy?	$P \times Q$ $1.10 \times 10\text{m} = \11m
(vi) What is the producer's income after the subsidy?	$B \times Q'$ $1.15 \times 12\text{m} = \13.8m
(vii) How much better off in terms of revenue is the producer?	\$2.8m

(b) (i) Shade in the area on the diagram which represents the welfare (deadweight) loss brought about by the subsidy, and explain why this has come about.

An amount paid by the government which does not form part of the CS or PS, and so is lost to the system/loss of allocative efficiency.

(ii) Work out the value of the deadweight loss created by the subsidy. Show your working.

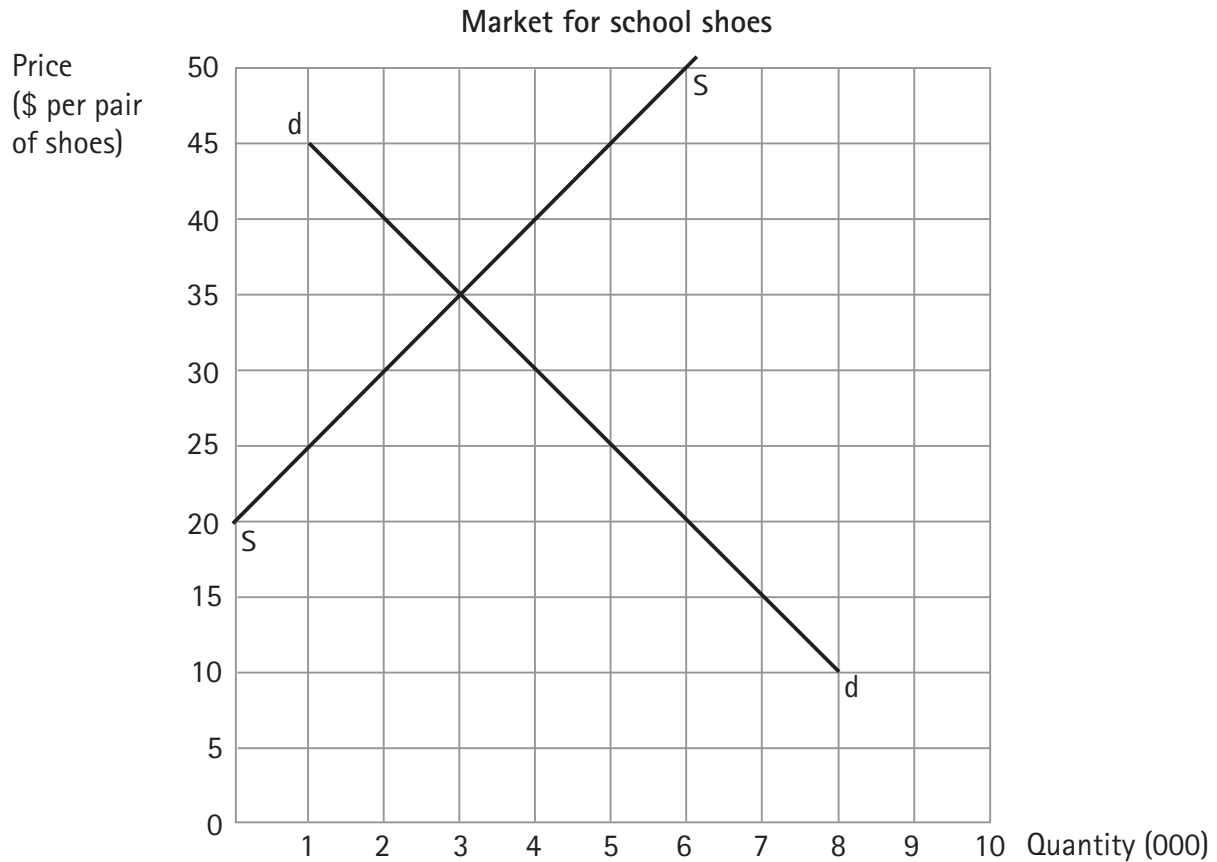
$\frac{1}{2} \times b \times h$, $\frac{1}{2} \times 2 \text{ million} \times \$0.15 = \$150\,000$ or $\$0.15 \text{ million}$.



eLearneconomics: Subsidy incidence (3)

Student response _____

Study the graph 'Market for school shoes' and answer the questions that follow.



(a) (i) How much would the subsidy have to be per pair of shoes for the price to fall to \$25?

(ii) On the diagram show the effect of a subsidy that results in a price of \$25 per pair of shoes. Label the new equilibrium quantity Q' .

(b) (i) What price does the producer receive after the subsidy?

(ii) What is total consumer spending after the subsidy? _____

(iii) Calculate the cost to the government of such a subsidy. _____

(iv) Calculate the change in consumer surplus.

(v) Calculate the change in producer surplus.

(vi) Calculate the deadweight loss.

eLearneconomics: Subsidy incidence (3a)



Solutions

Study the graph 'Market for school shoes' and answer the questions that follow.



(a) (i) How much would the subsidy have to be per pair of shoes for the price to fall to \$25?

\$20

(ii) On the diagram show the effect of a subsidy that results in a price of \$25 per pair of shoes. Label the new equilibrium quantity Q' .

(b) (i) What price does the producer receive after the subsidy?

\$45

(ii) What is total consumer spending after the subsidy? $\$25 \times 5\,000 = \$125\,000$

(iii) Calculate the cost to the government of such a subsidy. $\$20 \times 5\,000 = \$100\,000$

(iv) Calculate the change in consumer surplus.

\$40 000

(v) Calculate the change in producer surplus.

\$40 000

(vi) Calculate the deadweight loss.

$\frac{1}{2} \times \$20 \times 2\,000 = \$20\,000$