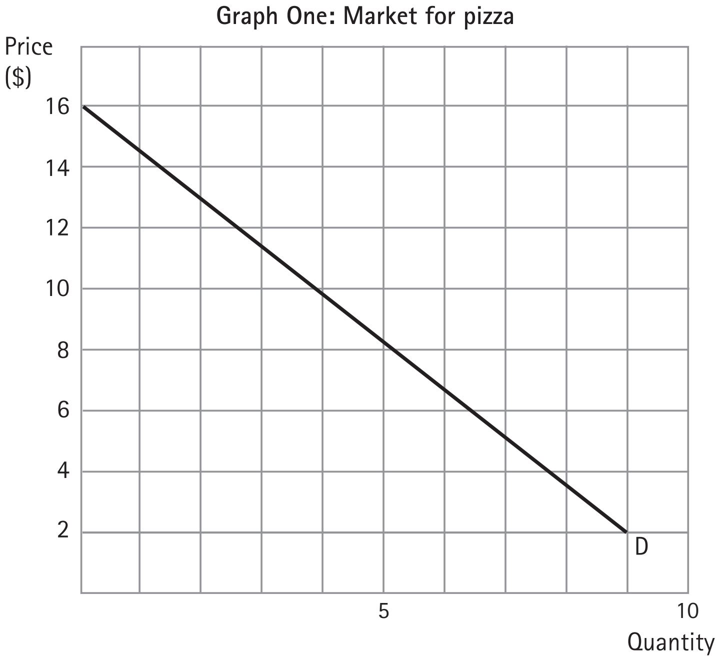
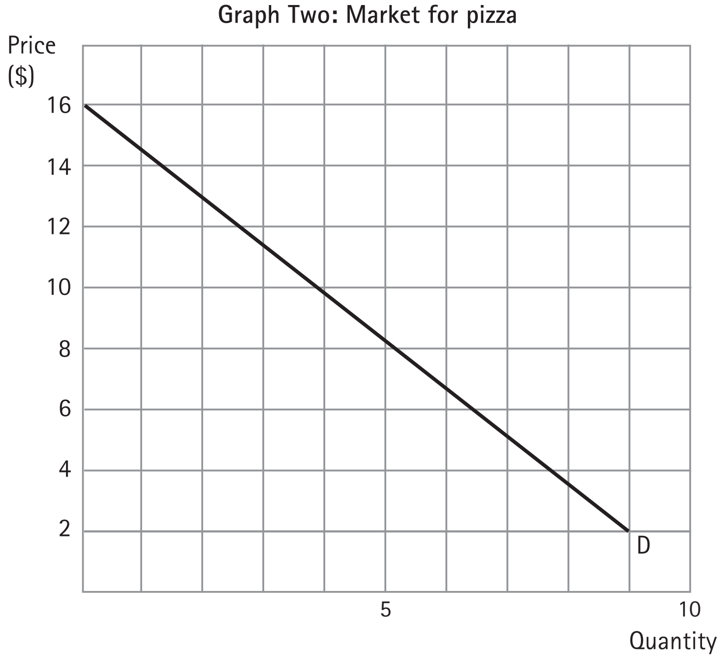
eLearneconomics: Consumer surplus and producer surplus (1)

Student response ______________________________





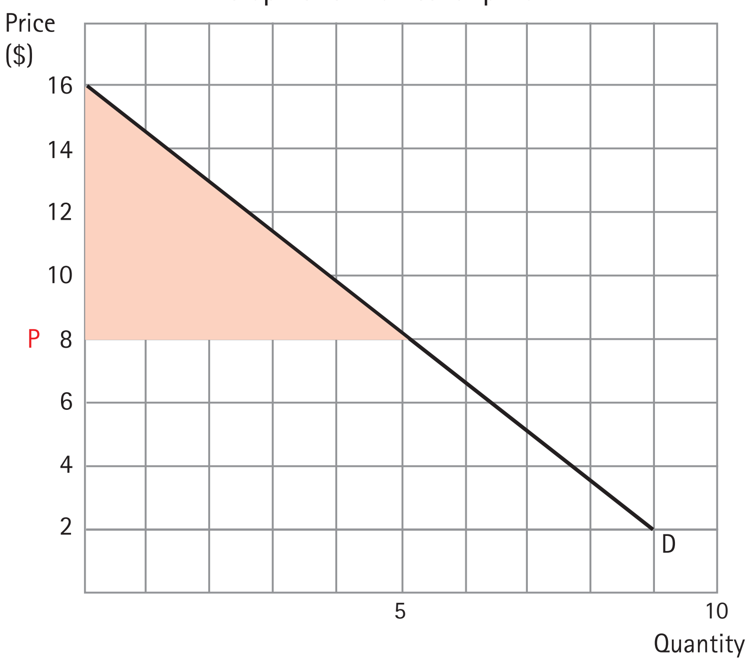
Discuss the effects of a change in consumer surplus as the price decreases from $8 to $2 per pizza. In your answer:

- Shade in the area of consumer surplus at $8 on Graph One and at $2 on Graph Two.
- Compare and contrast the effect on consumers and consumer surplus as the price changes.

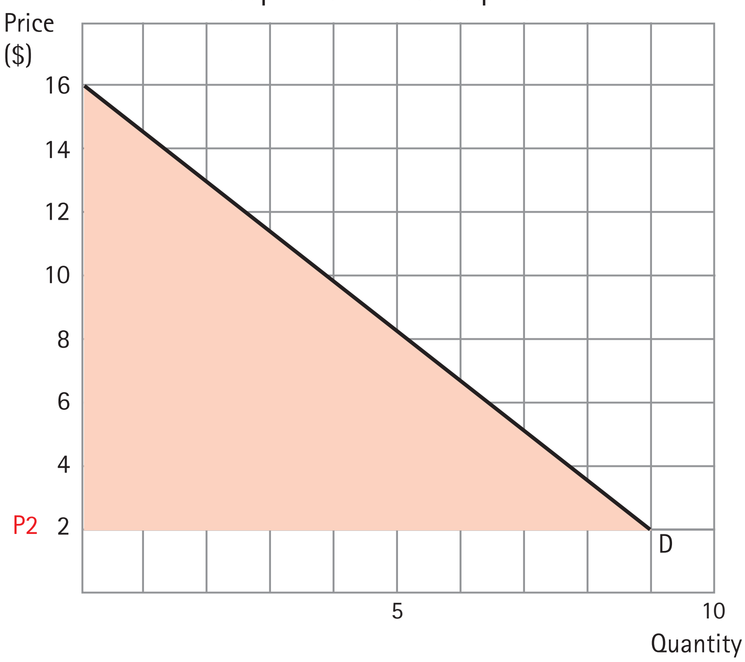
eLearneconomics: Consumer surplus and producer surplus (1a)

Solutions

Graph One: Market for pizza



Graph Two: Market for pizza

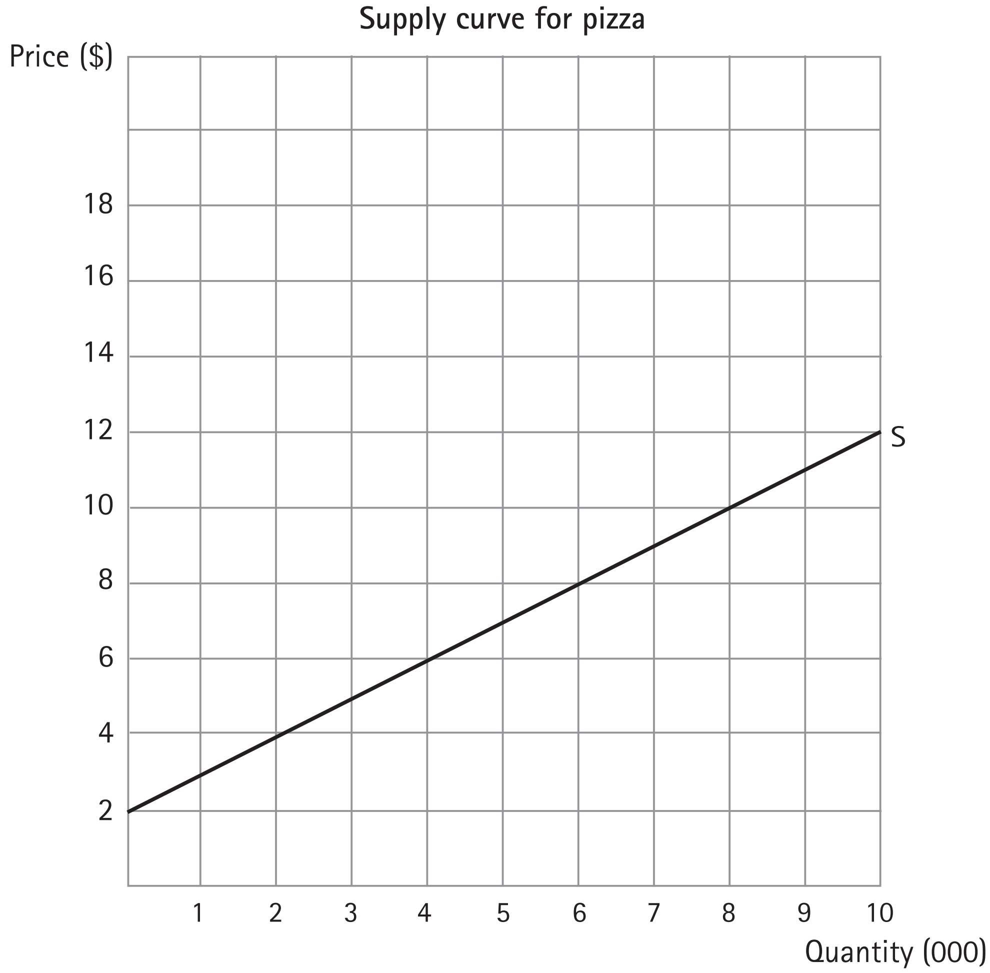


At $8 per pizza the consumer surplus is $20 (½ x $8 x5) and at $2 it is $63 (½ x $14 x9).

Consumer surplus represents the difference between what a consumer is willing to pay and what they actually pay rather than go without a good or service. As the price of pizza falls from $8 to $2 the consumer surplus increases by $43. The value of consumer spending will decrease from $40 ($8 x 5) to $18 ($2 x 9).

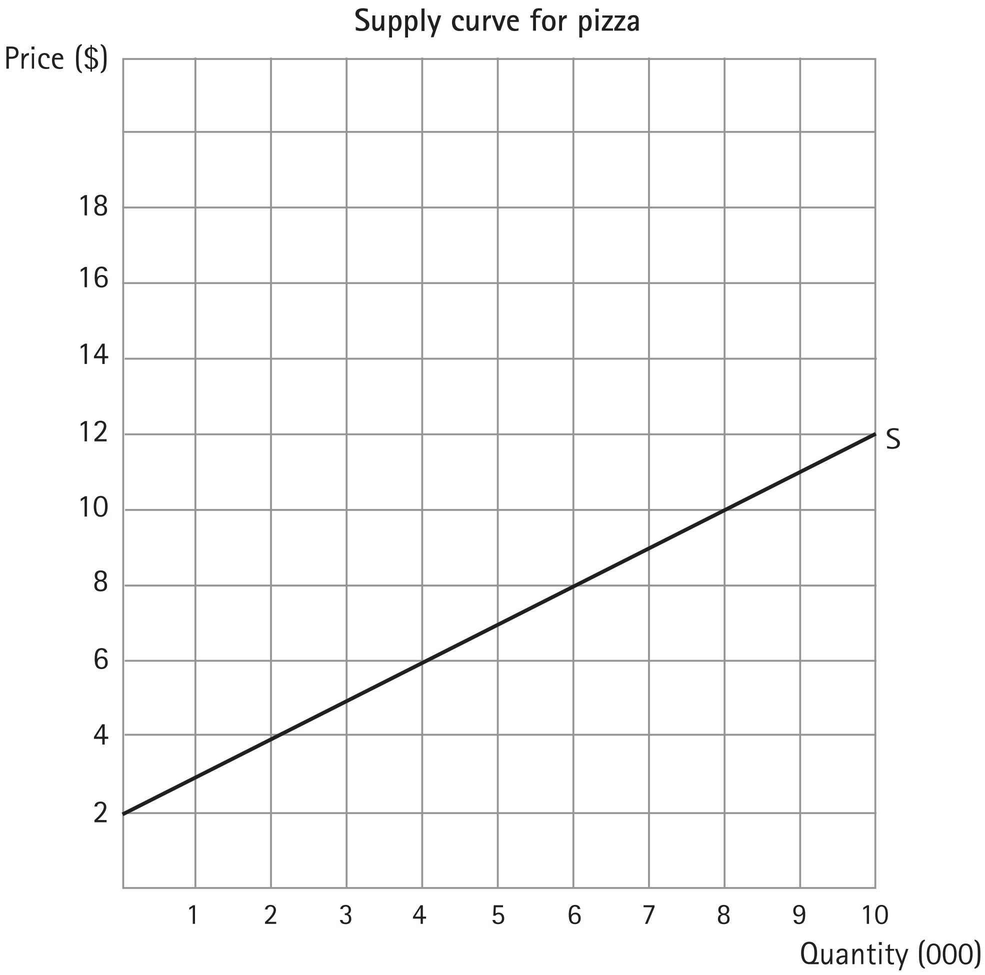
eLearneconomics: Consumer surplus and producer surplus (2)

Student response ______________________________



Discuss the change in producer surplus of a price change from $6 to $11 per pizza. In your answer, compare and contrast the effect on producers and producer surplus as the price changes.

Solution

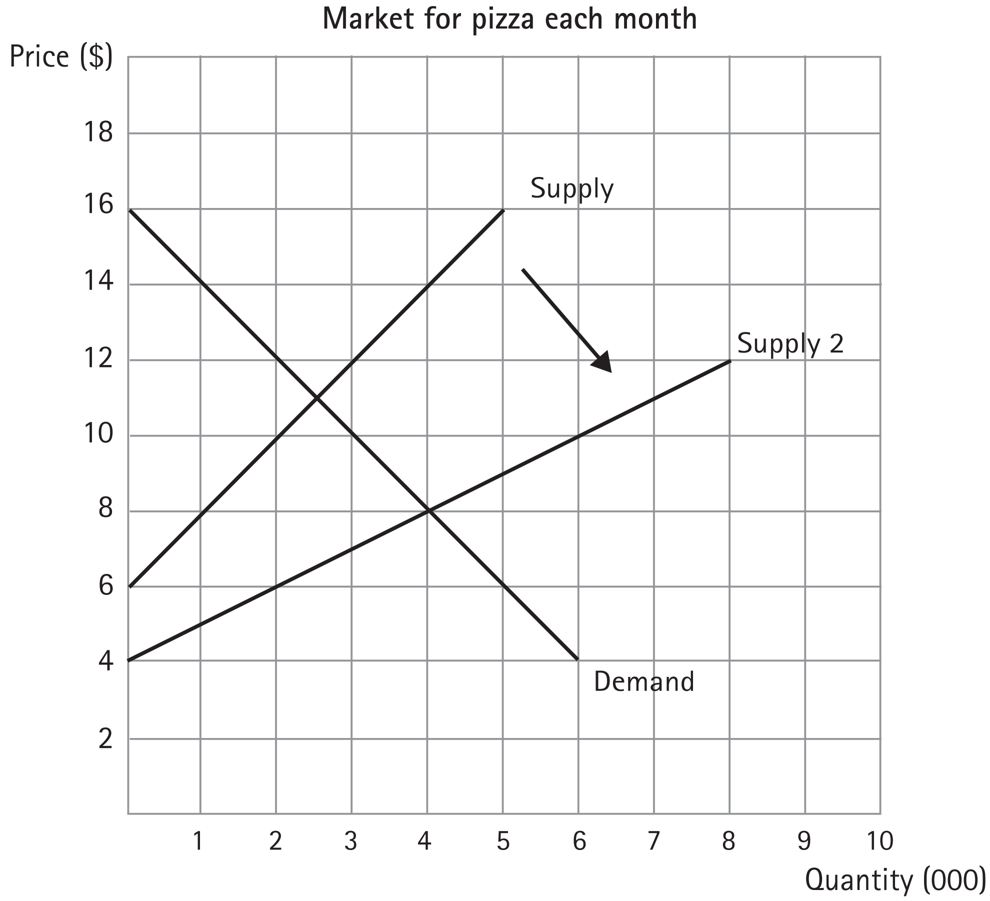


As the price increases from $6 to $11 producers' revenue increases from $2 400 ($6 x 400) to $9 900 ($11 x 900) an increase of $7 500. As price increases the firm will be more able to cover its costs because it is earning more revenue and it will be relatively more profitable to produce pizza. Pizza producers will switch resources out of a related good (a good that could be produced with similar resources) such as garlic bread into pizza.

Producer surplus is the difference between total earnings and total costs required to produce it. As the price increases the producer surplus increases from $800 (½ x 400 x $4)to $4 050 (½ x 900 x $9), an increase of $3 250.

eLearneconomics: Consumer surplus and producer surplus (3)

Student response

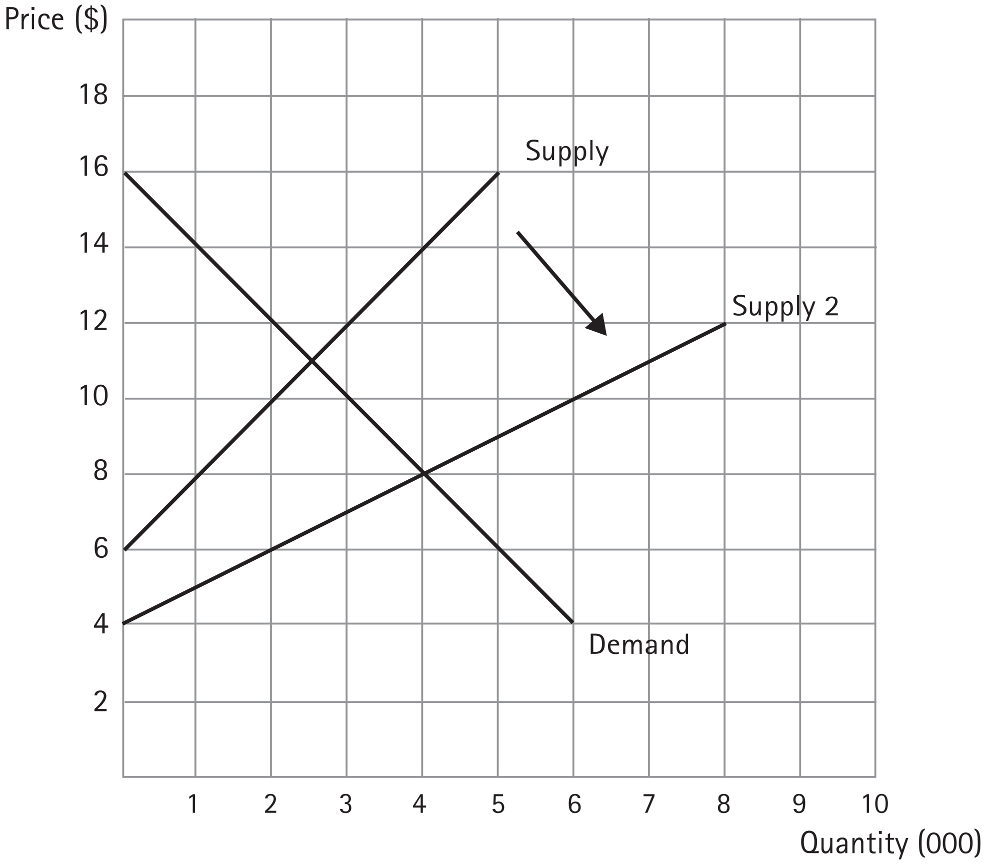


Compare and contrast the effect of new producers entering the pizza market. Explain the:

- effect on consumer and consumer surplus
- effect on producers and producer surplus
- refer to the diagram.

Solution

Market for pizza each month

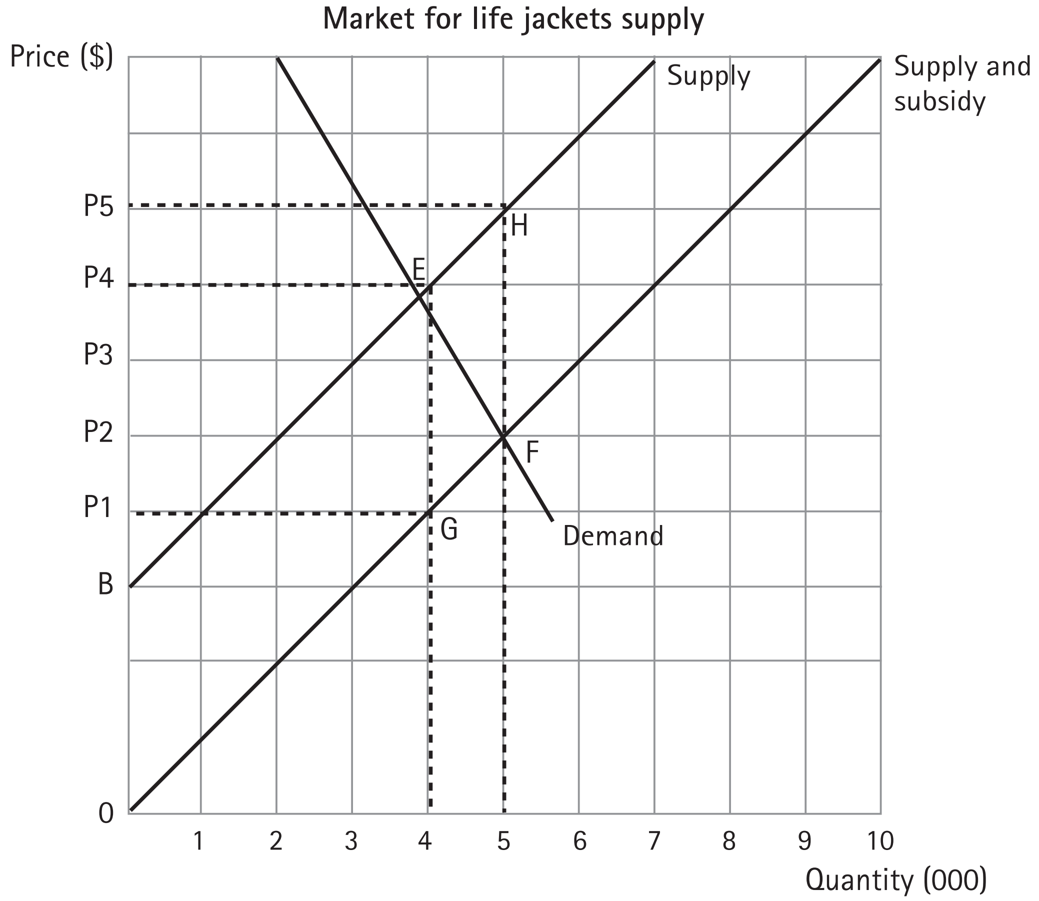


As new pizza producers enter the market, supply will increase, the equilibrium price will fall and quantity sold will increase. Consumers now pay $8 per pizza instead of $11, the quantity demanded will increase from 2 500 to 4 000, an increase of 1 500 pizza because consumers can afford more. Consumer surplus, which is the difference between what consumers are willing to pay and what they actually pay rather than go without pizza will increase from $6 250 (½ x 2 500 x $5) to $16 000 (½ x 4 000 x $8), an increase of $9 750.

Producers will now receive $8 a pizza instead of $11. Total revenue will increase from $27 500 ($11 x 2 500) to $32 000 ($8 x 400), an increase of $4 500. Producer surplus is the difference between total earnings and total costs required to produce it. Producer surplus will increase from $6 250 (½ x 2 500 x $5) to $8 000 (½ x 4 000 x $4), an increase of $1 750.

eLearneconomics: Consumer surplus and producer surplus (4)

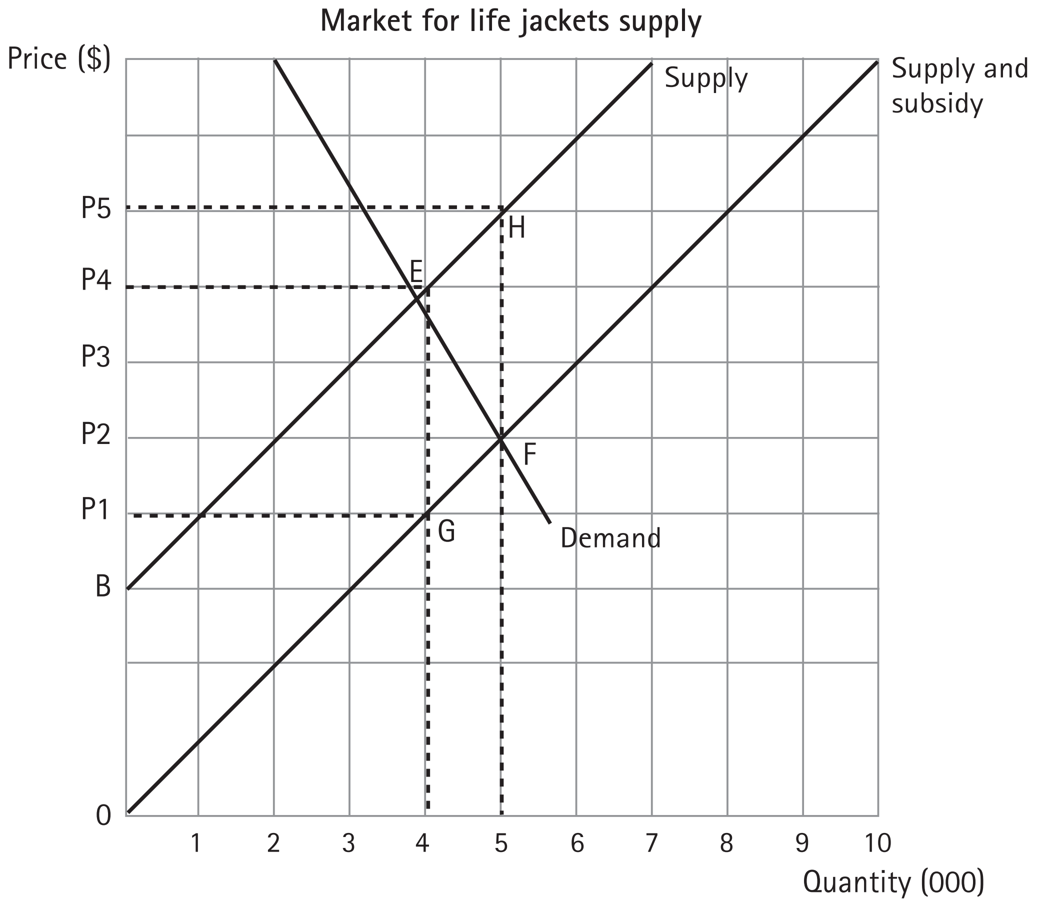
Student response ______________________________



Compare and contrast the effect of a subsidy placed on life jackets on participants in the market. Explain the effect on consumers and consumer surplus, producers and producer surplus and the government.

eLearneconomics: Consumer surplus and producer surplus (4a)

Solutions



A subsidy is a payment by government to firms to keep costs down, supply will increase and price decrease.

Consumers will now pay a lower price P2 instead of P4, the quantity demanded will increase from 4 000 to 5 000. Consumer surplus will increase by the area P4EFP2.

Producers will now receive price P5 instead of P4, producer revenue will increase as firms will receive a higher price and more life jackets are sold. Producer surplus increases by the area P5HEP4.

The cost to the government of the subsidy is the area P5HFP2, There will be a deadweight loss resulting from the subsidy of HEF because this area is that part of consumer surplus (CS) and producer surplus (PS) not picked as part of the subsidy.