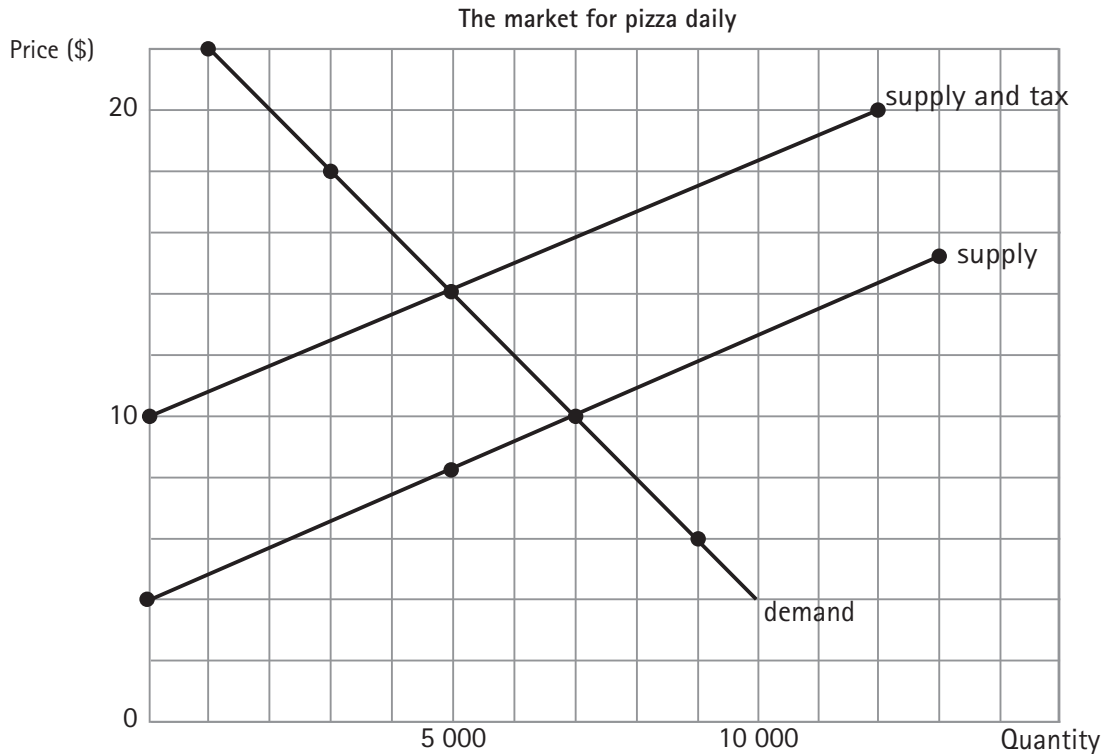




eLearneconomics: Sales tax and the market (1)

Student response

Study the graph and answer the questions that follow.

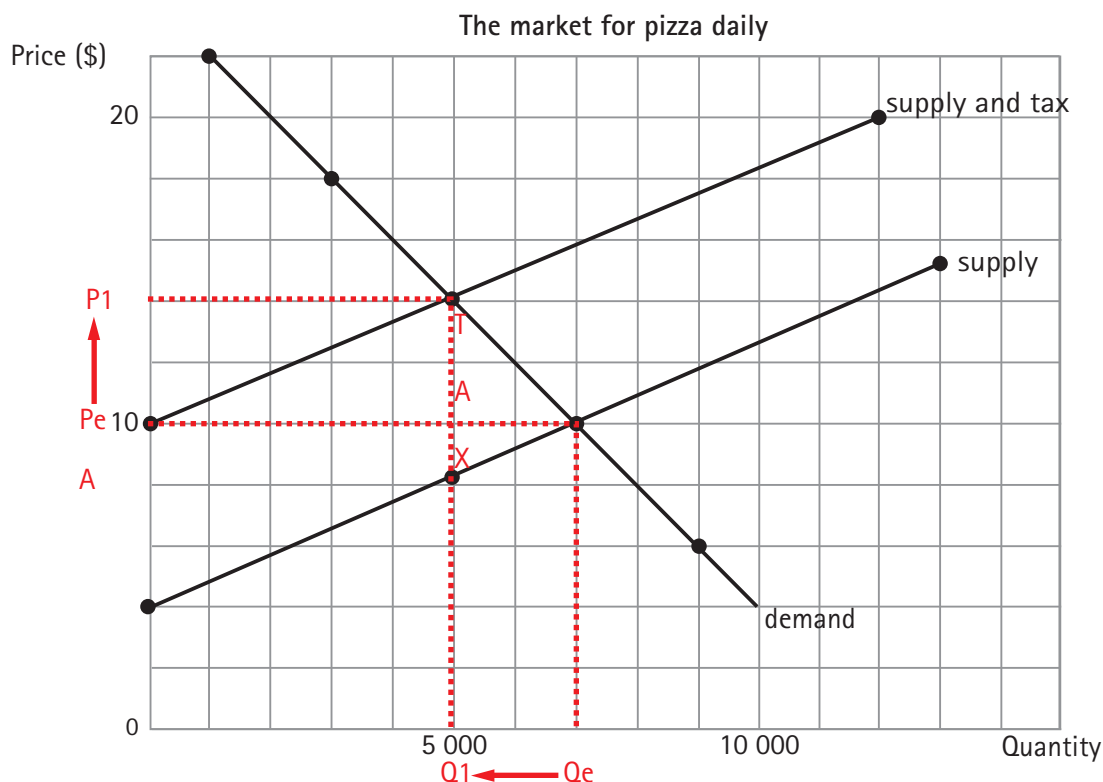


- a Referring to the graph, identify:
- the number of pizza consumers buy before _____ after _____
 - the price per pizza that consumers pay before _____ after _____
 - the price per pizza that producers receive before _____ after _____
 - the total tax revenue the government will earn from this tax. _____
- b Explain fully how a tax on pizza might affect different sectors of the economy. In your answer you should:
- explain the change in price to the consumer and the producer
 - explain the immediate effect on the government and any benefits to society
 - refer to the graph.

eLearneconomics: Sales tax and the market (1a)



Solutions



- a
- the number of pizza consumers buy before 7 000 (Q_e) after 5 000 (Q₁)
 - the price per pizza that consumers pay before \$10 (P_e) after \$14 (P₁)
 - the price per pizza that producers receive before \$10 (P_e) after \$8 (A)
 - the total tax revenue the government will earn from this tax. $\$6 \times 5\,000 = \$30\,000$ (Tax per unit multiplied by Q₁)

The price paid by consumers of pizza will increase from \$10 (P_e) to \$14 (P₁). Consumers will look to buy a relatively cheaper substitute. Consumer spending stays the same at \$70 000.

The producers' price will fall as tax is paid over to the government (and not all of the tax can be passed on to the consumer). The price producers receive now is \$8 (A) instead of \$10 (P_e) per pizza. Firms' revenue falls from \$70 000 to \$40 000.

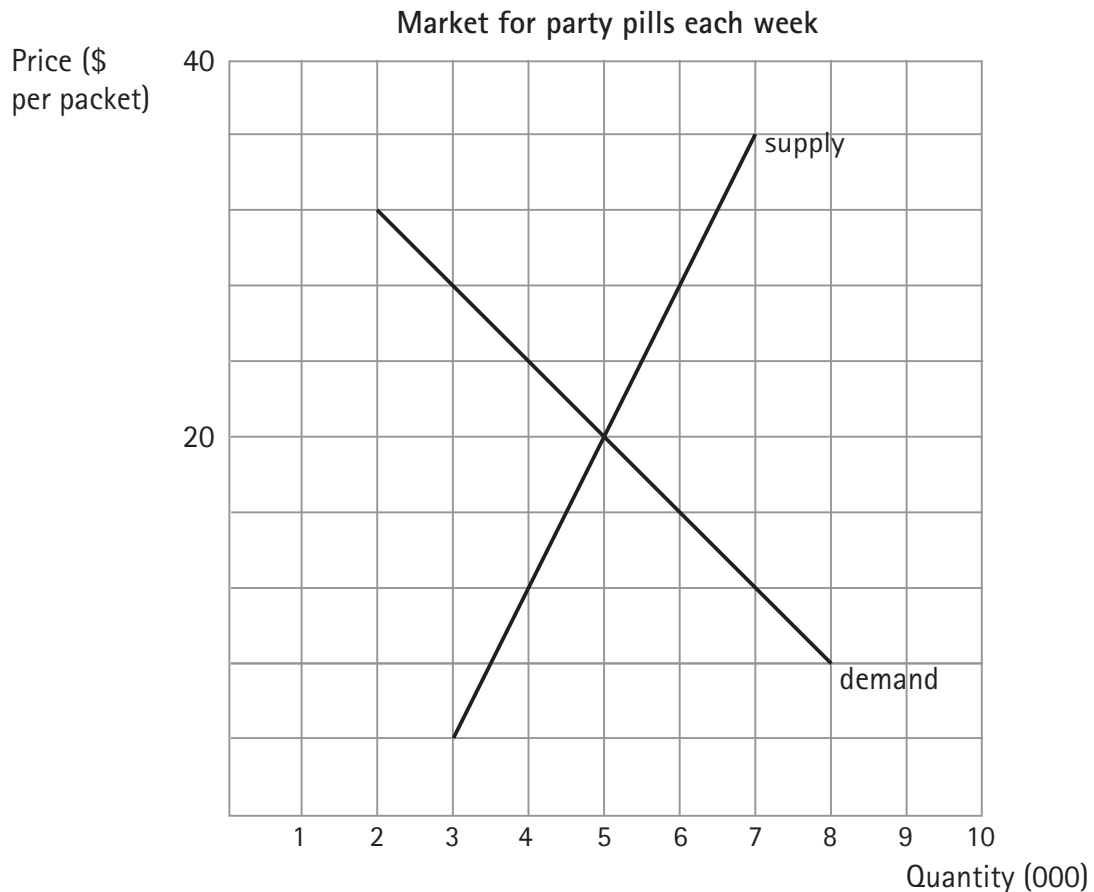
The government will collect \$30 000 in tax revenue because they will gain tax of \$6 per pizza sold multiplied by 5 000 pizzas daily. The money collected by the government (\$30 000 daily) could be used to educate consumers about healthier eating options by means of advertising campaigns. OR The money collected could be spent on improving other areas of health related to obesity.

Explains the effects of a sales tax by referring to consumers, producers, government and using figures from the graph. Correct economic terms are used.



eLearneconomics: Sales tax and the market (2)

Student response

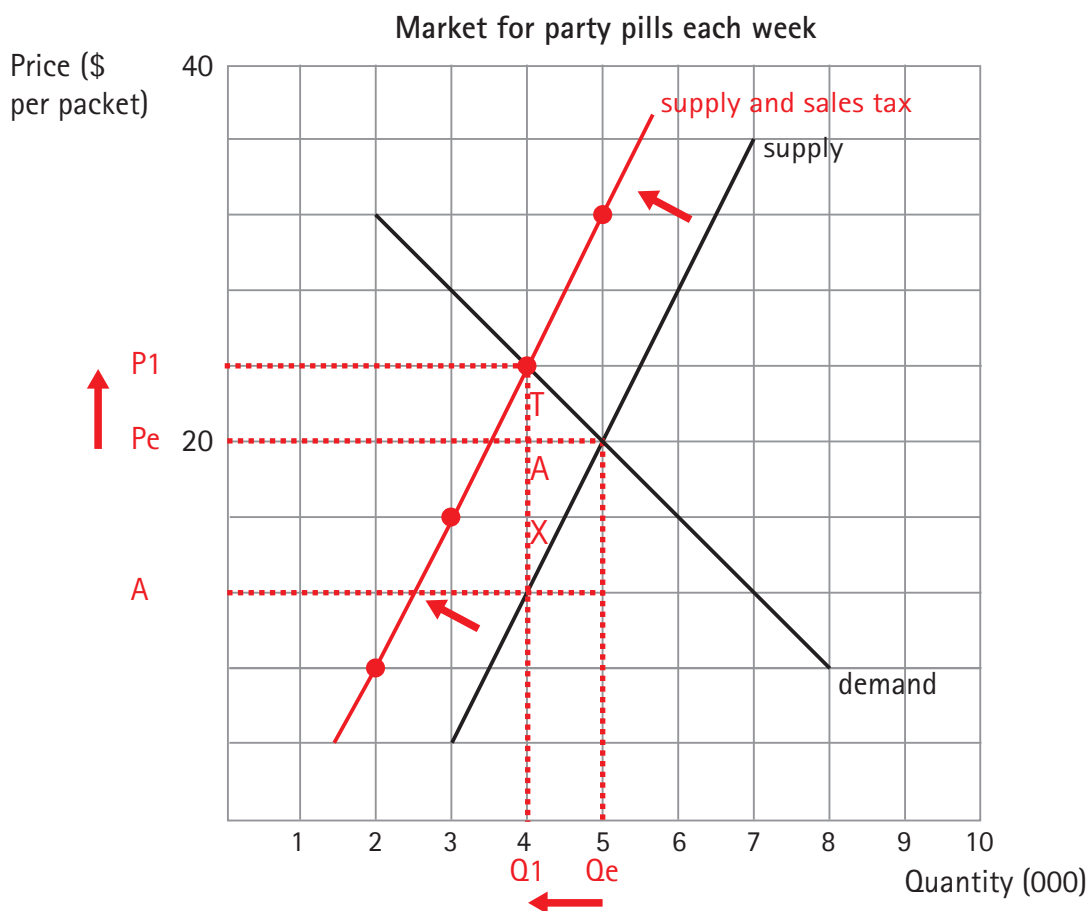


- a
- (i) On the graph above, show the original equilibrium price and quantity (label as P_e and Q_e).
 - (ii) Show the effect of a \$12 per unit sales tax on party pills.
 - (iii) Show the new equilibrium price and quantity (label as P_1 and Q_1).
- b Explain fully how a tax on party pills might affect different sectors of the economy. In your answer you should:
- explain the change in price to the consumer and the producer
 - explain the immediate effect on the government and any benefits to society
 - refer to the graph.

eLearneconomics: Sales tax and the market (2a)



Solutions



The price paid by consumers of party pills will increase from \$20 (P_e) to \$24 (P_1) per packet. The price that producers receive will fall from \$20 (P_e) to \$12 (A) per packet because tax is paid over to the government. The firms' revenue will fall from \$100 000 per week to \$48 000; they may decide to sell another product which is relatively more profitable.

The government will collect \$48 000 in tax revenue because they will gain tax of \$12 per packet of party pills sold multiplied by 4 000 packets. Fewer party pills being consumed by individuals should mean fewer health issues and fewer hospital resources used on treating individuals who suffer side-effects from using party pills. The increase in the price of party pills may encourage some individuals to give up OR discourage others from starting to use them.

Explains the effects of a sales tax by referring to consumers, producers, government and using figures from the graph. Correct economic terms are used.