

Assignment #1 Answer Key

Question 1 (18)

(3) A) [Steve is assuming that Gibson guitars are price inelastic.] [Steve thinks ~~that~~ that if he raises the price, he will not lose many sales.] [Steve believes that if he raises the price, his revenue will increase, as the increased price per unit will outweigh lost units sold.]

$$B) E = \frac{\% \Delta Q}{\% \Delta P}$$

$$\% \Delta Q = \frac{150 - 100}{(150 + 100)/2} \times 100\% = 40\%$$

$$E = \frac{40\%}{14\%}$$

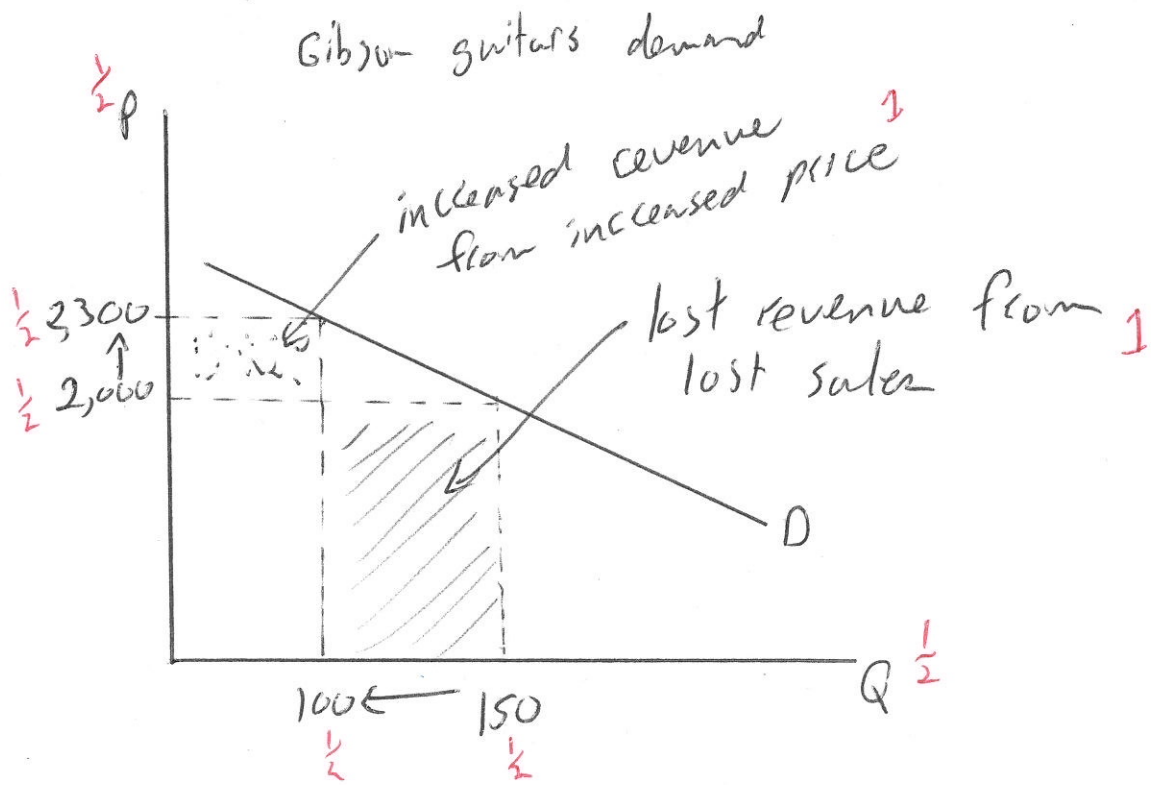
$$\% \Delta P = \frac{2300 - 2000}{(2300 + 2000)/2} \times 100\%$$

$$E = 2.86$$

$$= 14\%$$

[Based on this price increase and change in sales, Gibson guitars are price elastic.]
[This implies that this price increase will cause Steve's total revenue to go down.]
[Steve's initial assumption about the elasticity of Gibson guitars was not correct.]

(5) C)



(4) D)

lost revenue: $(150 - 100) \times 2000 = \$100,000$ ↓

gained revenue: $(2300 - 2000) \times 100 = \$30,000$ ↑

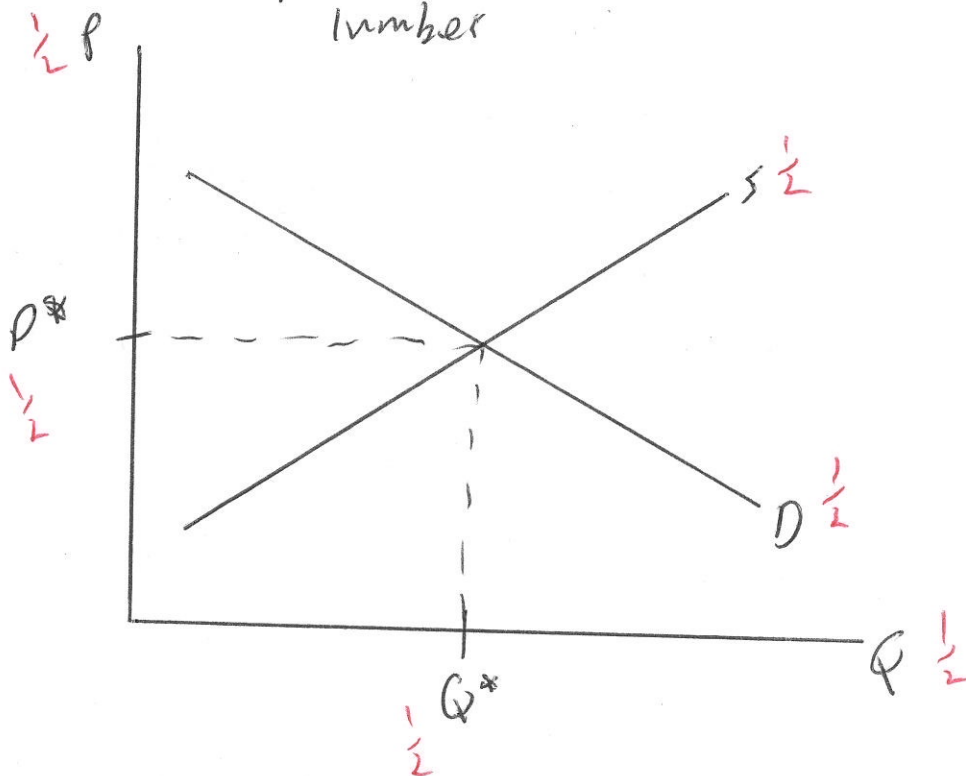
net change in revenue = $30,000 - 100,000$
 $= -\$70,000$ ↓

[Steve lost \$70,000 dollars of revenue
when he raised his price ↓]

Question 3 (20)

Canadian
market for softwood
lumber

(3) A)

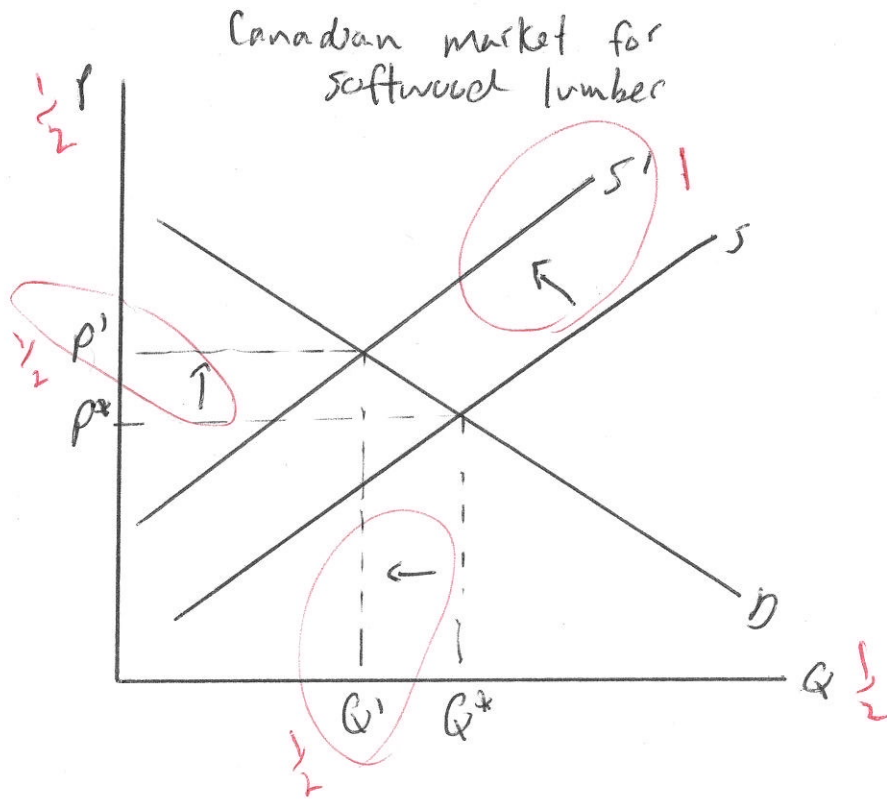


(4) B)

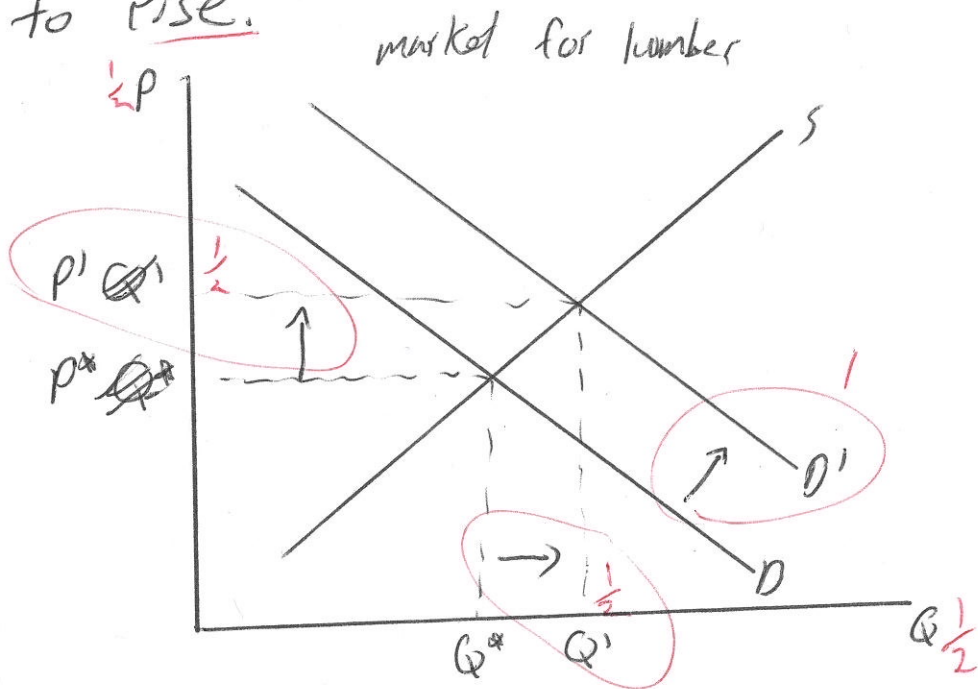
Damage to pine forests would be represented by a shift in the supply curve. The supply curve would shift left, showing a decrease in the supply of lumber. The equilibrium price would go up and the equilibrium quantity would go down.



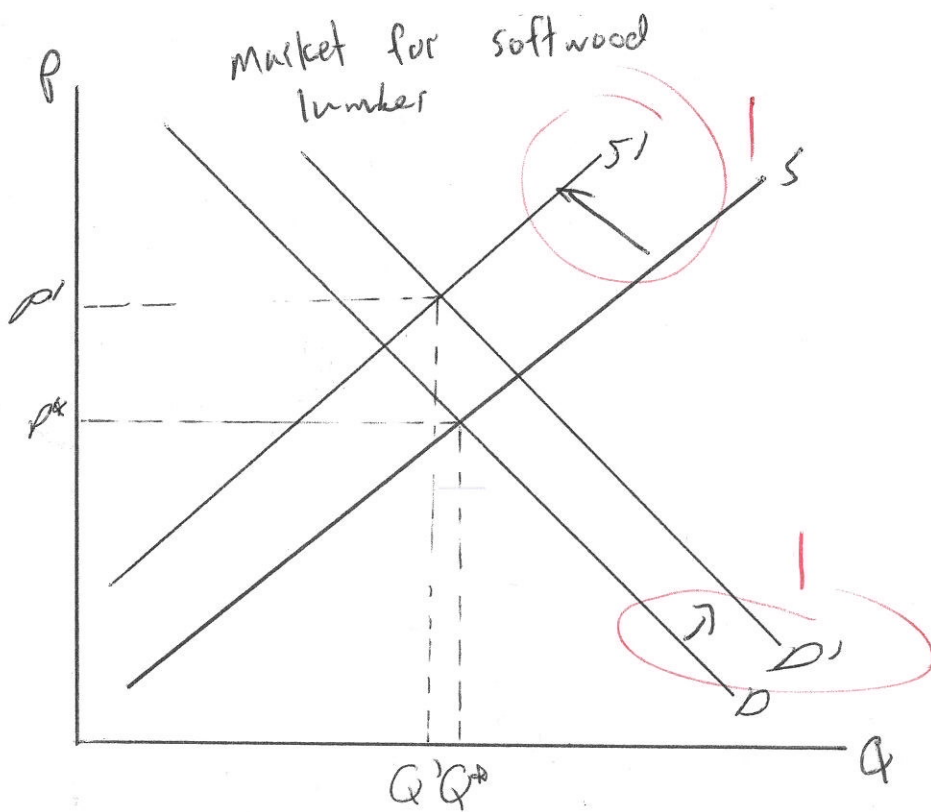
B) cont.



(4) C) Lumber is an input into houses, so an increase in the demand for houses would cause an increase in the demand for lumber. The demand curve would shift to the right. This would cause both price and quantity to rise.



①
⑤



- Both effects cause ~~the~~ the price to rise, so price unambiguously rises.
- [The decreased supply ¹ would cause quantity to go down, and the increased demand ¹ would cause quantity to go up.] ~~These~~ [without knowing the relative size of each ¹ effect, it is impossible to say whether the net effect on Q will be. The effect on Q is ambiguous]

* Note: in my graph Q goes down.
This is simply due to how I drew it.

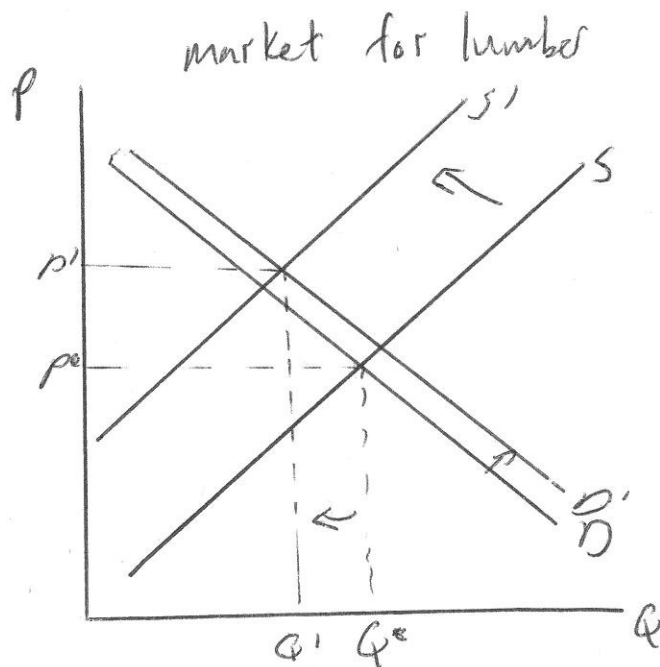
E) Yes, I would be able to make a more informed guess on the overall effect on quantity

(4)

A small housing boom would mean a small shift in demand for lumber, which would have a small increasing effect on quantity.

A drastic reduction in supply would cause a large shift in the supply curve, which would have a large decreasing effect on quantity.

The decreasing effect on quantity would outweigh the increasing effect on quantity and the net effect would be an overall decrease in the quantity of lumber.



* note:
I have included a graph in my answer, but the question did not ask for one. If a graph was not provided, no marks should be lost for that.