

Economics 1 Answer Topics

Week 4

Exercise 4.2c 4.3b 4.5c 4.6b 4.12d 4.13a 4.14b 4.15c 4.16c 4.17c 4.18a 4.19b

Exercise 4.20

- Group A – 0.593; Group B – exactly twice as much, 1.286. Note that the price falls from 100% to 90%, hence the average price for the midpoint calculation is 95%.
- The discount reduces revenue from group A, and increase revenue from group B.
- The discount should be offered to group B, but not to group A.

Exercise 4.21

- 2.
- Lower. No need to calculate the new elasticity: it suffices to note that the change in quantity is the same, but is now divided by a larger number (11000 rather than 10000).
- The same. Again, no need to calculate the new elasticity. You just multiply all quantities by 1.2. So the new percentage change in quantity is $1.2 \times 4000 / (1.2 \times 10000)$, so the same as before.

Exercise 4.22

- Cross-price elasticity of good X with respect to the price of good Y is -1.5 . So when the price of X increases 1%, the quantity demanded of Y falls by 1.5%. The goods are complements.
- Income elasticity of demand for W is -1 . When income increases by 1%, quantity demanded for W falls by 1%. W is an inferior good.
- You need to study the next chapter to answer this question.

Exercise 4.23

- Group A – $\epsilon_A = 0.905$; Group B – exactly three times as much, $\epsilon_B = 2.715$.
- The discount should be offered to group B, but not to group A.
- The discount would reduce revenue in group A, from 160,000 to 158,400 because demand is inelastic ($\epsilon_A < 1$); would increase revenue in group B, from 144,000 to 172,800 because demand is elastic ($\epsilon_B > 1$).