

Homework Set 1

1. (5%) Are there any parts of the syllabus/web pages you do not understand? You may either Type "No" or list any questions. Either answer is acceptable, I will respond to questions.
2. (10%) Explain whether you agree or disagree with the following statement: If the government places a per unit tax on the production of a good the quantity supplied by producers will increase because the producer will receive a higher price.
3. (5%) Explain whether you agree or disagree with the following statement. If two goods are perfect substitutes, a fall in the production of one good due to an earthquake destroying production facilities. will lead to an increase in the price of the other good.
4. (5%) Explain whether you agree or disagree with the following statement. If two goods are perfect complements, a fall in the production of one good due to an earthquake will mean a rise in the price of the other good.
5. (10%) In 2003 the state of Ohio raised sales taxes by 1%. Some economists suggested that consumers will have been better off if, instead, the state had just imposed a 1% tax on all retailers instead. Explain whether you agree or disagree. You may ignore any difficulties in collecting the tax.
6. (5%) Explain whether you agree with the following statement. If the of sales of a product is down, it must be that consumers prefer a substitute.
7. (5%) Explain whether you agree or disagree with the following statement: Last year, widgets sold for \$5 each. 10,000 were sold. This year widgets will sell for \$7; projected sales are 8,000 units. Assuming that projection is accurate, the arc price elasticity of demand for widgets is -0.5. Hint: disagree and show the right number.
8. (5%) A commodity has a demand function $Q = 50 - 2p$. Compute the point price elasticity when $Q = 20$.
9. (5%) A commodity has a demand function $Q = 50 - 2p$. Compute the arc price elasticity over the range $Q = 20$ to $Q = 25$
10. (5%) A government study has concluded that the demand for a commodity is

Price	Quantity
10	25
12	19

16	12
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Compute the arc price elasticity when p changes from 12 to 16; when p changes from 16 to 12.

11. (10%) Explain whether you agree or disagree with the following statement. If we want to reduce gasoline prices, we can do so by imposing price controls. We will have shortages, but at least we will have lower gas prices.
12. (10%) What would be the shape of indifference curves between Cours and Budweiser Beers for someone who is believes "A beer is a beer"?
13. (10%) Explain why although different people can have different indifference curves; why one individual's indifference curves can never cross".
14. (10%) Explain whether you agree or disagree with the following statement: An economist would classify a new automobile that does not start in cold weather as an inferior good.