

ECON 101

TA Worksheet, Module 5

Name: _____

DATE: _____

1. Think of some goods you buy that (for you) have very inelastic demand. Why is your demand inelastic for these products?

For me: coffee beans.

2. My son, Levi, wanted to sell lemonade on the sidewalk by our house. I told him he had to charge \$1 per cup. After selling 10 cups he got tired and gave up. The next day I said he could charge \$2 per cup. That day he decided to stay out longer and sold 30 cups. Using this info, what can we calculate? What number do we get?

$$P = 1 \\ Q = 10$$

$$P' = 2 \\ Q' = 30$$

So:

$$E_s = \frac{\frac{\Delta Q}{Q}}{\frac{\Delta P}{P}} = \frac{\frac{20}{10}}{\frac{1}{2}} = \frac{2}{\frac{1}{2}} = 4$$

3. Suppose we have this demand curve: $Q = 20 - 0.5P$. What is the price elasticity of demand if the price falls from 6 to 4?

$$\text{At } P = 6, \quad Q = 20 - 0.5(6) = 17 \\ P' = 4, \quad Q' = 20 - 0.5(4) = 18 \quad \left| \quad E_D = \frac{\frac{1}{35}}{-\frac{1}{5}} = -\frac{5}{35} = -\frac{1}{7} \right.$$

4. Suppose two goods are PERFECT complements (you never buy one without buying the other). How does the cross-price elasticity of demand relate to the products' PRICE elasticity of demand?

They're equal! (eg Right and Left shoes)

A change in the price in one good affects the other's demand one-to-one.

5. At a price of \$12/dozen, Doug's 'Nuts sells 100 dozen doughnuts. At a price of \$8/dozen Doug's would sell 200 dozen. Is demand elastic or inelastic?

$$P = 12 \quad Q = 100$$

$$P' = 8 \quad Q' = 200$$

$$E_D = \frac{\frac{1}{3}}{-\frac{1}{5}} = -\frac{5}{3} \approx -1.6$$

PRACTICE QUESTIONS – from Practice Exam 1 Old

Question 9

1 pts

(Figure: Market for Stevia) Stevia is a natural sweetener that is used as a sugar substitute. Which of the following graphs illustrates the impact of a rise in the price of Stevia on the demand for sugar?

substitute
"RIVAL"



☐ Graph A

☐ Graph B

☐ Graph C

☒ Graph D

Question 26

1 pts

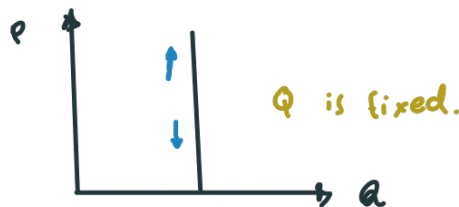
The price elasticity of demand for a good with a vertical demand curve is:

☐ elastic.

☐ inelastic.

☐ perfectly elastic.

☒ perfectly inelastic.



Question 14

1 pts

Holding all else constant, if people eat out more at expensive restaurants when they earn more, then expensive restaurant meals are

☐ goods with a congestion-effect.

☐ goods with a network-effect.

☐ inferior goods.

☒ normal goods.

Question 34

1 pts

Suppose supply shifts out and demand shifts back. What happens to the equilibrium price and quantity?

☒ Price falls. The effect on quantity is uncertain.

☐ Quantity falls. The effect on price is uncertain.

☐ Both price and quantity fall.

☐ Quantity rises. The effect on price is uncertain.

☐ Price rises. The effect on quantity is uncertain.

☐ Both price and quantity rise.

