

Quiz One
PPA 723, Spring 2005
Professor John McPeak

Name: _____

The total quiz is worth 20 points. Each question is worth 2 points, and each sub question is worth an equal share of the two points.

- 1) The demand curve is given to you as $Q=400-75*p$.
- a. Fill out the following table (use the relatively higher price / relatively lower quantity pair in the elasticity calculation).

Price	Quantity	Elasticity
\$1.00		-----
\$2.00		
\$3.00		
\$4.00		
\$5.00		

- b. Draw this demand curve with price on the y-axis and quantity on the x-axis. Identify the range over which the demand curve is inelastic and over which it is elastic.

3) You are given that $p=50-4*q$ is the inverse demand curve and $p=10+6*q$ is the inverse supply curve.

a. What is the equilibrium price quantity pair if the market is perfectly competitive?

b. Illustrate the effect of a price floor set at \$46 on the graph.

c. Describe the outcome of this policy in terms of quantity supplied and quantity demanded. If there is excess supply or excess demand, describe the size of it in terms of the quantity of the shortage or surplus (calculate numbers here).

4) A local ski area is considering raising the price of an annual pass from \$1,000 to \$1,250. If the number of annual passes sold is 12,000 and the best available information suggests that the price elasticity of demand for annual passes is -1.8, answer the following questions.

a. What is the predicted membership level after the price is raised?

b. Compare total revenue for the ski area at the annual pass fee of \$1000 and at the price of \$1250. Which is higher?

c. Will a price decrease for the annual fee to \$900 from \$1,000 raise or lower annual revenue from the baseline of \$1,000 and 12,000 passes? By how much?

8) Circle whether the statement is true or false:

- a. A price decrease for a good that is inferior will have a larger total effect than substitution effect.

TRUE FALSE

- b. The substitution effect indicates that a price increase for a particular good leads to decreased consumption of that good holding utility constant.

TRUE FALSE

- c. Only if all prices used in calculating the CPI increase at the same rate will a cost of living adjustment based on the CPI will overcompensate recipients of this adjustment.

TRUE FALSE

- d. A Giffen good must also be an inferior good.

TRUE FALSE

- e. In a two good world, both goods must be normal to avoid violating the “more is better than less” assumption about preferences.

TRUE FALSE

- f. Indifference curves shift outward when a consumer’s income changes

TRUE FALSE

10) Over the course of the fall, the price of jump ropes has gone up by 9%. Elmo is claiming credit, as his new video for toddlers released in August shows kids how to exercise using jump ropes and this video has sold well. Telly is not so sure about this, and argues that the price increase is due to increases in production and transport costs related to increased fuel prices over the course of the fall.

a. Graph Elmo's argument on a supply and demand graph.

b. Graph Telly's argument on a supply and demand graph.

c. Which explanation is more consistent with the facts if the quantity sold of jump ropes also increased by 4%? Justify your answer.