DUE DATE: _____ **NAME: _____**

CHAPTER 4: DEMAND AND ELASTICITY WORKSHEET

Definition of **Elasticity of Demand**:

It is a measure of how responsive quantity is to a price change. The **higher** the measure then the **more responsive** consumers will be to a change in price. The **lower** the measure then the **less responsive** consumers will be to a change in price.

1. The elasticity of demand is _____ in the _____ run because consumers have **MORE** time to adjust.

2. An Elasticity of 1.0 of greater = _____ demand *(page 110 in book)*

3. An Elasticity of exactly 1.0 = _____ demand

4. An Elasticity of between 0 and 1.0 = _____ demand

5. Use the Elasticity formula to calculate values of Elasticity for all the situations below. Change negatives to positives.

STEP 1: The formula used to calculate the percentage change in quantity demanded is:
| [QDemand(NEW) - QDemand(OLD)] / QDemand(OLD) |

STEP 2: The formula used to calculate the percentage change in price is:
| [Price(NEW) - Price(OLD)] / Price(OLD) |

STEP 3: **(STEP 1) / (STEP 2)**

Price		Quantity		**STEP 1** % change in quantity demanded	**STEP 2** % change in price	**STEP 3** Price Elasticity of Demand
Initial	*New*	*Initial*	*New*			
25	30	100	40			1. _____
40	70	120	90			2. _____
200	220	80	64			3. _____
50	75	150	135			4. _____

In each case identify whether you would describe it as **elastic** / **unit elastic** / **inelastic**

1. _____
2. _____
3. _____
4. _____

6. What happens to the Elasticity of Demand if there are **many** substitutes for a good? Is it **elastic** or **inelastic**? Why?

7. Given the data below, calculate the price elasticity of demand when the price changes from $9.00 to $10.00.
ANSWER: _____ ***CHANGE ALL NEGATIVE NUMBERS TO POSITIVES***

Data for Good X	
Price ($)	Quantity Demanded
7.00	200
8.00	180
9.00	150
10.00	110
11.00	60

8. Is the demand for Good X **Elastic** or **Inelastic** between $9 and $10? ***Use the above demand schedule to answer this.***

9. What does it mean for a good to be **elastic**?

10. What type of demand would there be for a good that had **NO** substitutes? *Circle One*

Elastic **Inelastic**

11. Which way would the demand curve of Good X shift if the price of Good Y (a **complementary** good) increased? *Circle One*

Left **Right**

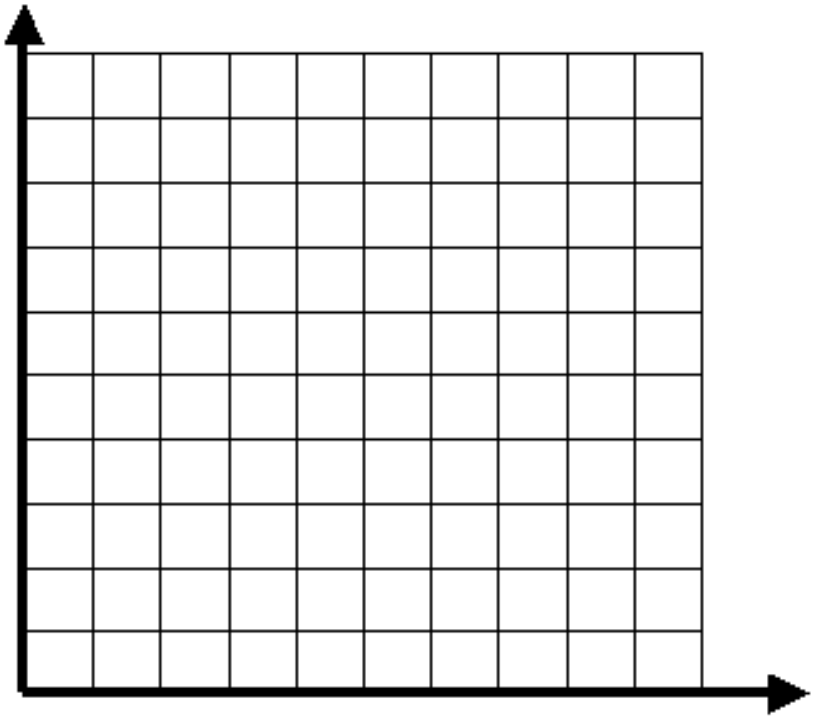
12. What happens to the Demand Curve of a Good X if the price of Good Y (a **substitute** good) **increases**? Explain **why** the demand curve for Good X changed?

Left **Right**

13. Kobe's favorite drink is cola. He buys a 12 pack from his local supermarket and has noticed that the price often varies. His monthly demand for cola is shown below: From the information provided in the demand schedule, draw a labeled demand curve below.

Use the graph space to draw the curve. Label the demand curve D1.

Kobe's Weekly Demand for Cola	
Price ($)	Quantity Demanded
5.00	2
4.50	3
4.00	4
3.50	5
2.50	6



14. Kobe's drinks cola drinks to give him energy - he loves Dr. Pepper, but sometimes Mr. Pibb (a substitute good for Dr. Pepper) is on special sale. Given the lower price for Mr. Pibb, a new demand schedule had to be created for Dr. Pepper. **Use the graph space above you created in Question 13 to draw the new demand curve. Label the new demand curve D2.**

DEMAND SCHEDULE

PRICE FOR DR. PEPPER	**OLD DEMAND**	**NEW DEMAND**
$5.00	2	**1**
$4.50	3	**2**
$4.00	4	**3**
$3.50	5	**4**
$2.50	6	**5**

15. From the information shown on figure 1 below, construct a demand schedule showing Kobe's monthly demand for Dr. Pepper.

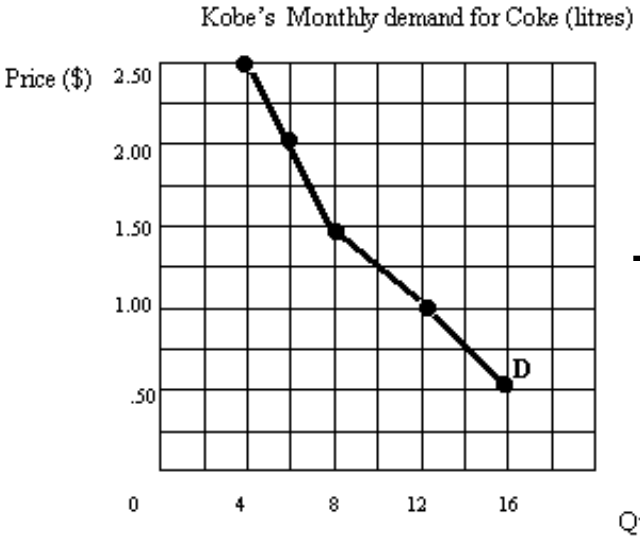


Fig 1.

Kobe's Weekly Demand for Cola	
Price ($)	Quantity Demanded

16. Which way would the demand curve for Good X (an **inferior** good) shift if your income **increased**? *Circle One*

Left **Right**

17. In the following scenarios describe if there is a shift to a demand curve for Good X (a superior good) and state which way the curve will shift **(Left, Right, or Stays the Same)**

a) an increase in price for Good X A. _____

b) a fall in customer's income B. _____

c) an increase in the price of a substitute good C. _____

d) a decrease in the price of a complement good D. _____

18. Why do suppliers want to create more inelastic demand relationships in the products that they sell?