

Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (20 points each) For each of the following products, would you use a survey, observational research, clinic or experiment to estimate the demand curve? Explain your logic.

- A) A new type of car
- B) A new flavor of fruit drink

2) (15 points) What is the big drawback of doing consumer clinics. Explain why that is a drawback.

3) (15 points) What is the big drawback of doing consumer surveys. Explain why that is a drawback.

4) Below are regression results for the demand of oranges based upon the price of oranges, the price of apples, and income.

A) (10 points) What is the predicted equation for the demand function of oranges? How accurate is the formula? Explain your logic.

B) (5 points) If the price of oranges is \$2/orange, the price of apples is \$1/apple, and income is \$60,000.00, then what would this formula predict for the sales be? Show all work.

C) (10 points) Which variables are significant and which are not? How can you tell?

D) (5 points) Given the statistics, do you feel apples and oranges are substitutes, complements, likely substitutes, likely complements, or too difficult to tell? Explain your logic.

Regression Statistics						
Multiple R	0.827396					
R Square	0.684583					
Adjusted R Square	0.589958					
Standard Error	5.73387					
Observations	14					
Analysis of Variance						
	df	Sum of S	Mean Sq	F	Significance F	
Regression	3	713.5713	237.8571	7.234699	0.007253	
Residual	10	328.7726	32.87726			
Total	13	1042.344				
	Coefficient	Standard	t Statistic	P-value	Lower 95.	Upper 95.00
Intercept	-5.90477	9.513833	-0.62065	0.545557	-27.1029	15.29337
Poranges	-29.2777	7.055324	-4.14974	0.001142	-44.998	-13.5575
Papples	45.66681	15.55286	2.936232	0.011574	11.01287	80.32075
Income	0.001357	0.000687	1.976783	0.069673	-0.00017	0.002888