

Write your name on the cover of the test booklet and nowhere else. Enclose this sheet with the booklet. Failure to follow these directions will cost you 1 point. The test has 100 points (to be scaled up to 170 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 16-point question should take 8 minutes. Because of the class that follows your class, I cannot give you extra time.

1) I created some regression results for the demand of oranges based upon the price of oranges, the price of apples, and income. The results are:

Regression Statistics						
Multiple R	0.9001					
R Square	0.8888					
Adjusted R Square	0.7835					
Standard Error	3.235					
Observations	42					
Analysis of Variance						
	df	Sum of Squares	Mean Square	F	Significance F	
Regression	3	418.4773	139.4924	3.012	0.041864	
Residual	38	263.1237	26.31237			
Total	41	681.601				
	Coefficient	Standard Error	t Statistic	P-value	Lower 95%	Upper 95%
Intercept	12.4512	8.511138	1.46293	0.151111	-6.5128	31.4152
Poranges	-22.345	11.42362	-1.95603	0.057298	-47.7984	3.108412
Papples	-28.3213	13.9137	-2.0355	0.048299	-59.3229	2.680348
Income	0.002223	0.000614	3.618571	0.000805	0.000854	0.003592

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

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

C) (6 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.

2) (12 points) For EITHER the item in Part A OR the item in Part B, state what it is. Then briefly explain why a firm may want to do that and a problem with doing it.

A) Consumer clinics

B) Observational research

3) (12 points) Do EITHER Part A OR Part B.

A) State the equi-marginal principle and explain the economics as to why it should hold.

B) What is the slope of the budget constraint? Explain how we came to that conclusion.

4) (24 points) Do EITHER Part A OR Part B.

A) Draw a TP_L diagram and illustrate an increase in the capital stock. Explain why the curve moved as drawn and why the curve takes its shape.

B) Draw the MP_L and AP_L diagram and illustrate an increase in the capital stock. Explain why the curve(s) moved as drawn.

5) (26 points) Do EITHER Part A OR Part B.

A) Draw the indifference curves and budget constraint for cucumbers and peanut butter. Draw a decrease in the price of cucumbers. Show the income and substitution effects. Explain why the curve(s) moved as drawn, and how you got the income and substitution effects. Given your diagram, are they substitutes or complements? Explain your logic.

B) Draw the indifference curves and budget constraint for soda and pizza. Draw an increase in the price of soda. Explain why the curve(s) moved as drawn. Given your diagram, are they substitutes or complements? Explain your logic. Starting at the new budget constraint, draw a similarly sized increase in the price of pizza. Explain why the curve(s) moved as drawn.

Assuming the two price increases were the same percentage increases, what would happen to your budget constraint if you then got a pay raise of the exact same percentage? Explain your logic.