

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) (12 points) Answer EITHER Part A OR Part B.

A) Suppose that you agree to pay a friend \$500 year for 4 years to buy her car. Set up the calculation that would calculate how much you pay her if we assume the payments are made annually and the interest rate is 4%. Briefly state how you got each entry in the equation. Do not solve the equation.

B) Explain the *Risk Bearing Theory of Positive Economic Profits*.

2) (14 points) Do EITHER Part A OR Part B.

A) Suppose that when the price of bananas is \$0.15/lb you buy 56 pounds of strawberries during the year. If the price of bananas is \$0.25/lb you buy 44 pounds of strawberries during the year, then what is the cross-price elasticity between bananas and strawberries? Given the number you just calculated, are they complements or substitutes? Show all work. State how you made the calculation and how you determined which type of goods they are.

B) What is the economic reason that $MR < P$ (i.e. lies below demand) for all quantities except $Q = 1$? Explain the logic.

3) (14 points) For EITHER the product in Part A OR the product in Part B, give me a number that you think would represent that product's price elasticity **and** a second number that would represent the **same** product's income elasticity. Briefly explain how you chose those two numbers.

A) A Bethany College education.

B) Food.

4) (18 points) Copy the table below into your test booklet. Fill it in, showing all calculations you used.

Q	TC	TFC	TVC	ATC	AVC	AFC	MC
1	40	30					
3	90						
						6	30

5) (18 points) Illustrate EITHER the event in Part A OR the event in Part B on the supply and demand for steel filing cabinets. Explain the movement(s) of the curve(s).

A) The price of steel office desks increases.

B) The government puts an import tariff on steel.

6) (24 points) Do EITHER Part A OR Part B.

A) Suppose that the total cost function is given by $TC = 1000 + 5Q + 3Q^2$. Find the equations for TFC, TVC, ATC, AFC, AVC, and MC. BRIEFLY explain how you calculated each equation.

B) Draw the ATC, AVC, AFC, and MC diagram. Illustrate on it an increase in the cost of rent. Briefly explain why each curve moved or stayed still.