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 160 points) and is scheduled to take 50 minutes. Therefore, expect to spend 1 minute for every 2 points. For example, a 12-point question should take 6 minutes. I cannot give extra time because some students have a class after your class.

1) (10 points) Answer EITHER Part A OR Part B.
A) Use terminology and logic from this course to explain why you should not stay up studying all night just before an exam.
B) Use terminology and logic from this course to explain why not everybody was at the review session last night.
2) (10 points) Answer EITHER Part A OR Part B.
A) What is the law of comparative advantage? Does that mean free trade is good or bad? Explain your logic.
B) Explain how opportunity costs relate to the demand curve.
3) (14 points) Do EITHER Part A OR Part B.
A) Draw the PPF for bread and desks. Illustrate the effects of an unusually large wheat crop. Explain why the curve moved as drawn.
B) Draw the PPF for cars and hats. Illustrate the effects of an aluminum mine closing. Explain why the curve moved as drawn.
4) (16 points) Answer EITHER Part A OR Part B.
A) Draw the supply/demand diagram for chocolate. Illustrate the effects of people finding out that most cocoa comes from child labor and/or slave labor. Explain why the curve(s) moved as drawn. What happens to the price and quantity sold? https://foodispower.org/human-labor-slavery/slavery-chocolate/ DO NOT READ THE ARTICLE NOW.
B) Draw the supply/demand diagram for electric cars. Illustrate the effects of gasoline prices rising sharply. Explain why the curve(s) moved as drawn. What happens to the price and quantity sold?

## 5) (16 points) Answer EITHER Part A OR Part B.

A) Draw the supply/demand diagram for textbooks. Illustrate the effects of a decrease in the price of paper. Explain why the curve(s) moved as drawn. What happens to the price and quantity sold?
B) Draw the S/D diagram for corn in the grocery store. Illustrate the effects of an increase in the price of compostable trash bags. (Compostable trash bags are typically made from corn oil.) Explain why the curve(s) moved as drawn. What happens to the price and quantity of corn sold in the supermarket?
6) (16 points) Answer EITHER Part A OR Part B.
A) Draw a PPF for cars and food. Find a point where you think the opportunity costs of a car is 2 units of food. Explain how you reached that conclusion that the opportunity costs is 2 units of food.
B) Suppose that your GPA is a function of the hours of studying you do a day. The function is given by GPA $=-1+$ Hours $/ 2$, where Hours is the number of hours a day you normally study on a weekday. Draw that graph for hours between 0 and 9 . State how you know which variable goes on which axis, what the vertical intercept is, and what the slope is.
7) (18 points) Answer EITHER Part A OR Part B.
A) Draw the supply and demand for phones. Illustrate a price ceiling on the diagram. Explain why you changed the graph as drawn. Prove that consumers are hurt.
B) Draw the supply and demand for cotton shirts. Illustrate the effects of a quota on the diagram. Explain why you changed the graph as drawn. Are consumers helped or hurt? How can you tell? Are producers helped or hurt? How can you tell.

