

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 10 points. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Turn in the Excel file via Canvas. Place your name on an otherwise blank page of the Excel file. Failure to type this assignment 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.

All questions except for Questions #1 & #2 should be done before class.

- 1) (15 points) Run the regression using the data in the Lab #1 of the Excel file [lab6.xlsx](#). Remember the proper way to use the time to predict the quantity. Would you be willing to rely on this information to estimate the quantity over time? Why or why not?
- 2) (25 points) Use the data in Lab #2 to forecast quantity as a function of time, price, and income. Check for multi-collinearity of the independent variables. Is it acceptable to leave all three variables in? Why or why not? **If it is not acceptable**, re-run the regression without one variable and tell me why you left that variable out. **If it is acceptable**, then tell me how much you would expect to sell to a person with an income of \$50,000 if you charged \$10/unit in 1960.
- 3) (25 points) Draw the effort curve diagram. Explain why it takes this shape. How does it relate to the article at: <https://www.inc.com/john-boitnott/7-reasons-you-should-pay-your-employees-above-average-salaries.html> ? Of interest that article was from 2018/6/18. That same webpage posted this: <https://www.inc.com/jt-odonnell/heres-why-these-3-types-of-workers-will-lose-their-jobs-in-next-recession.html> about eight months earlier on 2017/10/4. Read the subtitle of the article and remember that the next recession started with COVID in 2020.
- 4) (25 points) Explain how the kinked demand curve can cause and price rigidity. Make sure you draw it and explain why it takes its shape.
- 5) (10 points) Explain how a fixed markup can lead to price rigidity.