

PROBLEM SET 4, PART 1

DUE BY 2 P.M. ON TUESDAY, MARCH 17TH

You may work together on the problems, but your answers must be ***in your own words*** and ***handwritten***. You also must ***list the other students with whom you worked***. As with Problem Set 3, your answers should be submitted through Gradescope.

For all questions be sure to explain your answers and to use graphs whenever appropriate.

1. Consider an industry where initially, because of prohibitive transport costs, the good cannot be imported or exported. Now suppose that because of innovations in transportation, international trade becomes possible, and that the world price of the good is greater than the price that had been prevailing in the U.S.
 - a. What is the effect of this change on the amount of the good produced and consumed in the U.S.? Does the U.S. import or export the good (or is it not possible to tell)?
 - b. What will happen to consumer surplus and producer surplus as a result of the opening up of trade? Does total surplus (the sum of consumer and producer surplus) rise, fall, or stay the same (or is it not possible to tell)?
2. In lecture, we analyzed how going from a situation without international trade to one with trade affects wages and employment in industries where wages and employment are determined by the intersection of labor demand and labor supply. Consider instead an industry where there is a negotiated wage that is above the equilibrium wage. Suppose that initially there is no international trade in the good produced by the industry, but that the industry is then opened up to trade, and the world price of the good is below the price that had been prevailing in the U.S.

How, if at all, will this development affect employment, the wage, and unemployment among workers in the industry?
3. Answer the following short questions about macroeconomic data.
 - a. In February 1968, the federal minimum wage was \$1.60 per hour. The consumer price index was 34.2 in February 1968 and is 258.82 now. What is the February 1968 minimum wage expressed in today's dollars? Since the federal minimum wage is currently \$7.25 per hour, has the federal minimum wage risen by more or less than the overall price level since February 1968?
 - b. (Multiple choice; no explanation needed.) If inflation was 1% in 2018 and 2% in 2019, this means that:
 - i. prices were on average approximately 1 percent higher in 2019 than in 2017.
 - ii. prices were on average approximately 3 percent higher in 2019 than in 2017.
 - iii. it is not possible to tell because the statement only provides information about inflation, not prices.