

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 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it 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.

1) (25 points) Suppose that consumers spent \$500, firms built \$250 worth of buildings, the government spent \$200, and foreigners bought \$100 worth of goods while selling us \$120 worth of goods. Buildings lost \$10 worth of their value. \$30 worth of sales tax was collected. The businesses paid \$80 worth of taxes, received \$15 from the government in the form of subsidies, and retained \$5 of profits. We paid \$230 worth of Social Security tax and the government paid out \$240 worth of Social Security. The citizens paid \$220 worth of income tax. Find GDP, NDP, NI, PI, and DPI. Show all work and if you need to calculate something like net exports, explain how you did the calculation.

2) (10 points each) For each of the following, determine how much GDP changes. If it does not change, then explain why it does not change. If it does change, then tell me which part of GDP is changing and explain how you reached that conclusion.

- A) The government pays \$500 for a toilet.
- B) I pay you \$50 to mow my lawn.
- C) You buy \$500 worth of stock in IBM paying \$10 in commissions.
- D) The used car dealer sells you a car for \$1000 which cost them \$550.
- E) Your grandmother receives a Social Security check for \$400.

3) (15 points) We use real GDP per capita as a measure of how well off a country is. However, this systematically underestimates how well off poor countries are. Explain why this is true using three different examples of types of production which are not counted.

4) (10 points) Why should the value added method give the same result for GDP as the expenditure method? Explain your logic.