

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.

If you are leaving for break early, the assignment is due before you leave.

1) (20 points) Suppose that consumers bought \$1000 worth of goods and services; firms built \$200 worth of new buildings; the government bought \$500 worth of goods and services; we exported \$100 worth of goods; we imported \$120 worth of goods; we earned \$15 from abroad while paying \$13 abroad; corporations paid \$17 in sales tax and earned \$25 in the form of subsidies from the government; the government paid \$140 in Social Security benefits; and individuals paid \$400 in income tax. Calculate GDP, NDP, NI, PI, and DPI. **Show all work and state what you are adding and subtracting.** If you need some information not provided, assume it is zero.

2) (15 points) What is meant by the phrase “real GDP per capita using PPP”? Why do we use this as a measure of how well off a country is. (Explain why we use “real” not “nominal,” why we calculate “per capita,” and why we use “PPP.”)

3) (15 points) Explain how economic growth causes urban congestion.

4) (20 points) Why is it important to have patents? Why is it important to not have the patent life be too long?

5) (15 points) Suppose you are saving for retirement and you want \$1,000,000 when you retire. If you are expecting a 6% real return and save \$500 per month, it will take you 40 years and 1 month to reach your goal. If you expect a 6% real return and save \$1000 per month, it will take you 30 years to reach your goal. Why does saving for about 3/4 of the time cause your necessary savings to double? There are two economic reasons.

6) (15 points) What is creative destruction? How does that help a country develop?