

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. 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) (20 points) In the article found at the link below, they discuss an alternative to GDP that they call GPI. GPI (and a similar, but better established measure called Net Economic Welfare or NEW), partially corrects some problems with GDP. What is one of these problems and how does it partially correct for it? However, GPI (and NEW) have not become widely used by economists because of the difficulty of calculating them. Why is GPI difficult to calculate? (You do not need to know anything about NEW. I only mention it because it is more established than GPI and the economics profession has a better opinion of it.)

<https://www.citywatchla.com/index.php/be-green/22327-gpi-vs-gdp-does-size-matter-more-than-substance>

2) (10 points each) For each of the following events, determine how much GDP changes. Also determine which part of GDP is affected. Explain your logic. If you do not use a number, make sure you explain why you did not use it. Answer each part in a separate paragraph or lose points for not following directions.

- A) Biden's smaller infrastructure proposal, will spend \$1.5 trillion (\$1,500,000,000,000.00) on highways, bridges, railroads etc. if it is passed. Assume it passes even though I doubt it will.
- B) You buy a used car for \$4000 which cost the dealer \$2,500.
- C) A German student at Bethany pays \$5000 for room and board.
- D) You buy stock in Ford for \$3000 and pay \$5 in commissions.
- E) I pay you \$50 to shred the leaves on my lawn.

3) (30 points) Suppose that consumers bought \$1000 worth of goods. Firms spent \$400 on new equipment. The government spent \$500 on Congressional salaries. We imported \$280 worth of goods and exported \$250 worth of goods. The buildings had \$40 of wear and tear. Businesses paid \$50 in sales tax and \$10 in income tax. They kept \$100 in retained earnings. The government paid out \$200 in Social Security payments. People paid \$190 in income taxes. Calculate GDP, NDP, NNP, NI, PI, and DPI. Write in words what you are adding and subtracting. Show all calculations. If you need a number which I did not give you, assume it is zero.