Place your name on the back of this sheet of paper and nowhere else. Staple your answers 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) (10 points) Explain 
$$r = \frac{i - \pi}{1 + \pi}$$

- . Make sure you explain both  $\pi$ .
- 2) (15 points) Explain several reasons why real GDP per capita does not do a good job of measuring how well off the citizens of a country are.
- 3) (20 points) Calculate the nominal GDP for both years. Calculate the real GDP with 2011 as the base year for both years. Calculate the GDP Deflator for both years. What was the inflation rate in the economy? Show all work and briefly explain what you did in each step.

Good	P 2011	Q <sub>2011</sub>	P 2012	Q <sub>2012</sub>
Helmets	\$50 each	40	\$60 each	20
Bikes	\$400 each	5	\$440 each	10

- 4) (15 points) Explain why the value added method of calculating GDP should give the same result as the expenditure method.
- 5) (30 points) Draw the production function for production's being a function of labor and the supply/demand for labor. Illustrate the effects of an increase in the amount of capital on both graphs. Explain why the curve(s) move as drawn.
- 6) (10 points) Why does the production function for production's being a function of capital take its shape?