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) (20 points) Suppose the first quintile has $5 \%$ of the income; the second quintile has $8 \%$ of the income; the third quintile has $15 \%$ of the income; the fourth quintile has $30 \%$ of the income; and the tenth decile has $25 \%$ of the income. Draw the Lorenz Curve. Explain how you found it. Use that to estimate the Gini Coefficient. Explain how you estimated it.
2) (20 points) Why might too inequitable distribution of income be bad for the economy? Why might too equitable distribution of income be bad for the economy?
3) (15 points) What is a problem with looking at "absolute poverty" as a measure of how many people are in poverty? Explain your logic.
4) (10 points) Suppose the poverty line is $\$ 1 /$ day and the average income of the people who earn less than the poverty line is $\$ 0.75 /$ day. Suppose further that $40 \%$ of the population is below the poverty line. What is the value for the poverty gap? Show all work.
5) (20 points) Explain the difference between the poverty gap and the headcount index. Which is a better measure of the problem with poverty? Explain your logic.
6) (15 points) What is meant by immiserizing growth? How can it occur?
