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) Explain  $\pi = \frac{\Delta M}{M} - \eta_Y \frac{\Delta Y}{Y}$ . You can treat  $\Delta X/X$  as a single variable once you define it.

You do not need to explain  $\eta_{\scriptscriptstyle Y}$ , but you must define it.

- 2) (30 point) In the Quantity Theory of Money, why is it important to know whether V is constant, predictable, or unpredictable? Explain why we might expect it to be constant. What is one thing it might it be a function of? Explain your logic.
- 3) (15 points) Critics of the Quantity Theory of Money complain that it is a black box. What does that mean and why is that a problem?
- 4) (35 points) Over time, V1 (velocity of M1) has risen and become unstable. However, V2 has remained stable. Why has V1 risen? Why is it unstable? Why hasn't that affected V2? What do you think has happened to V1 over the last two years? Explain your logic.