

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  $\pi = \frac{\Delta M}{M} - \eta_Y \frac{\Delta Y}{Y}$  except for  $\eta_Y$

2) (35 points) Write the equation for the Quantity Theory of Money. Why does it make sense that  $V$  is constant? In reality,  $V$  is a function of  $i$ . Why is that true? Is that effect more prominent for  $M1$  or  $M2$ ? Explain your logic.

3) (20 points) Why do we care if  $V$  is constant, predictable, or unpredictable? Explain your logic.

4) (20 points) Why do you think  $V1$  has grown over time? Explain your logic.

5) (15 points) In the real money demand equation, we use the nominal interest rate. Why? Explain your logic.