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) (15 points) Explain $\pi=\Delta \mathrm{M} / \mathrm{M}-\eta_{\mathrm{Y}}(\Delta \mathrm{Y} / \mathrm{Y})$ Do not worry about $\eta_{\mathrm{Y}}$.
2) ( 10 points) The book regularly writes that $\mathrm{r}=\mathrm{i}-\pi$. Why is that wrong? I.e., what is it forgetting about?
3) (20 points) We said that MV $=\mathrm{PY}$. What does the Neo-Classical school conclude (using this equation) about what happens when the money supply increases? Explain your logic.
4) (10 points) What happens to real money demand when the price level increases? Explain your logic.
5) (15 points each) For each of the following parts of the definition of a business cycle, explain what that phrase means and why it is important.
A) recurrent but not periodic
B) aggregate economic activity
C) comovement
