Problem Set A2
Econ 302 - Haworth
Due date: Thursday, July 16 (by 11:59pm)

Note that your answers to this problem set can be submitted via email or uploaded at Blackboard within the Assignments folder.

1. Explain how each of the following events affects the monetary base, the money multiplier, and the money supply. Assume that banks loan out all available money (i.e. banks end up with no excess reserves).

a. The Federal Reserve conducts an open market purchase.

b. The Fed lowers the discount rate.

c. Rumors about a computer virus attack on ATMs increase the amount of money people hold as currency rather than demand deposits.

d. In the stealth of night, the Fed flies across the U.S. and drops a stack of newly printed $100 bills on the porch of anyone currently taking Econ 302.

2. An economy has a monetary base of $1,000. Assume that banks loan out all available money (i.e. banks end up with no excess reserves).

Calculate the money supply in scenarios (a)–(d) and then answer part (e).

a. All money is held as currency.

b. All money is held as demand deposits and the Fed requires banks to hold 100% of deposits as required reserves.

c. All money is held as demand deposits and the Fed requires banks to hold 20% of deposits as required reserves.

d. People hold equal amounts of currency and demand deposits, and the Fed requires banks to hold 20% of deposits as required reserves.

e. The Fed decides to increase the money supply by 10 percent. In each of the above four scenarios, by how much should the Fed change the monetary base?