

# Week 9 worksheet

1. Suppose Daniel makes a \$ 5000 deposit to Chase bank. The reserve ratio set by the Federal Reserve is 25%

- (a) Depict the effect on Chase Bank's T-account when Daniel deposits this money, before any new loans are made. Identify both required and excess reserves. 3 points.

Chase Bank's Balance Sheet	
Assets	Liabilities

Figure 1: T-Account of Chase Bank

- (b) Suppose Chase makes as many loans as it legally can; depict Chase Bank's T account after these changes. 2 points

Chase Bank's Balance Sheet	
Assets	Liabilities

Figure 2: T-Account of Chase Bank

- (c) If this new loan is eventually fully deposited back into the banking system, and each subsequent deposit is eventually fully loaned back out, how much does the money supply change, in total, as a result of Daniel's deposit, and what will be the balance sheet of the entire banking system (including Chase Bank)? 5 points.

Banking System's Balance Sheet	
Assets	Liabilities

Figure 3: T-Account of the entire banking system

- (d) Finally, suppose the Federal Reserve Sells a \$1000 Treasury bill to Daniel, which he buys by writing a personal check. Depict the effect this will have on Chase Bank's T-Account. What will Chase be required to do, after paying out Daniel's personal check? 5 points.

Chase Bank's Balance Sheet	
Assets	Liabilities

Figure 4: T-Account of Chase Bank