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| **AP Macroeconomics**Mrs. ShackettMoney multiplier and money market diagram | Name |

*Student alert:* Make sure you read any money multiplier questions carefully to determine exactly which value the question asks for. For example, does it ask you to calculate the initial change or the final change?

Assume that $1,000 is deposited in the bank, and that each bank loans out all of its excess reserves. For each of the following required reserve ratios, calculate the amount that the bank must hold in required reserves, the amount that will be excess reserves, the deposit expansion multiplier, and the maximum amount that the money supply could increase.

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| --- | --- |
|  | Required reserve ratio |
|  | 1% | 5% | 10% |
| Required reserves |  |  |  |
| Excess reserves |  |  |  |
| Deposit expansion multiplier |  |  |  |
| Maximum increase in the money supply |  |  |  |

Will an increase in the reserve requirement increase or decrease the money supply? Explain.

What will happen to deposits, required reserves, excess reserves, and the money supply if deposits are withdrawn from the banking system?

What could happen at each stage of the money creation process to prevent the money supply from increasing the full amount predicted by the deposit expansion multiplier?

The Money Market

Draw a graph of the money market, illustrating the equilibrium interest rate. Now suppose there is an increase in the money supply. Show the change in the money supply and the resulting change in the equilibrium interest rate. What happens to the quantity of money demanded when the interest rate changes? Explain.

Suppose the demand for money increases. Show the change in money demand and the resulting interest rate on your graph. What happens to the quantity demanded of money? Explain.

Now do these…

1. Prices rise
2. Income increases
3. The Fed increases the money supply