AP® Macroeconomics
2001 Sample Student Responses

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Write in the box the number of the question you are answering on this page as it is designated in the examination.

3

3MACCLA

3 a) Janet's deposit has no immediate change in money supply, as M_1 already includes all demand-deposits and currency.

b) The bank can initially loan \$800. Their required reserves are \$200 ($.2(\$1,000) = \$200$) and ~~[illegible]~~ therefore \$800 are excess reserves and can be loaned.

c) The system can create \$4,000 of new money. Using the multiplier $\frac{1}{RR} = \frac{1}{.2} = 5$ times \$1,000 deposit creates \$5,000, minus the initial \$1,000 deposit which was already counted, equals \$4,000 new money.

d) The money supply may not increase by as much due to leakages. If either banks keep excess reserves or people hold on to excess cash rather than depositing, there will be less of an increase.

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3

3MACCLD

(a) Janet's deposit in the bank will increase the money supply by a factor of the multiplier.

(b) First federal can only loan out $800. This is because their reserve req. is 20%. They must keep 20% of 1000 in their ~~red~~ vaults.

(c) The multiplier for this bank is $\frac{1}{.2} = 5$. The max. money that can be created is $800 × 5 = $4000.

(d) The money supply will not increase by the full ~~amou~~ $4000 unless all of the additional money is loaned out. However, if any of it along the way is kept as cash, then the multipliers full effect will not have been attained.

3MACCLG

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question 3

(A) There is no change in the money supply immediately after her deposit, because both cash and money in checking accounts are a part of M-1.

(B) $20,000, The bank wants to have a 20% reserve, so the $1,000 deposited has to be 20% of whatever loans the bank makes. Therefore .20x = 1,000, where x is the amount of money loaned.

(C.) $2,000,000 The money multiplier accounts for all of the money created when one deposit is made. This money is made when the loans of one bank are deposited into another bank, who then loans out it's excess reserves.

(D) The money supply may not increase by this amount, because some banks may keep excess reserves.