

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

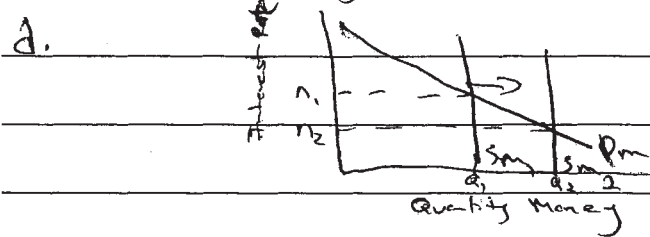
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a. The federal funds rate is the rate of interest that banks charge on loans to other banks in the Federal Funds Market.

b. To lower the federal funds rate, the Fed should buy securities. ~~sell~~

c. The monetary multiplier = $\frac{1}{\text{reserve ratio}} = \frac{1}{0.2} = 5$. If the Fed buys \$10 million in securities, then 20% of it must be kept ^{required} as reserves. $\$10 \text{ million} \times 0.2 = \2 million , so \$2 million are the required reserves, and excess reserves equal $\$10 \text{ million} - \$2 \text{ million} = \$8 \text{ million}$. The banking system can lend a maximum amount of excess reserves \times monetary multiplier; thus, the banking system can lend a max. amount of $\$8 \text{ million} \times 5 = \del{\$40} \$40 \text{ million}$. The banking system can lend a maximum of \$40 million.



The supply of money increases from S_1 to S_2 . Nom. int. rate falls from r_1 to r_2 .

Buying securities increases the money supply, and therefore decreases the nominal interest rate.

e. $\Delta \text{Real Rate Interest} = \Delta \text{Nom. Interest Rate} - \text{Inflation Rate}$

Based on the above equation, if ^{the change in} nominal interest rate is negative and the inflation rate is positive, then the change on the real interest rate will be negative, or the real interest rate will decrease if the Fed buys securities.