Chapter 13 Answers

17. When the monetary base increases by $2 Billion, the quantity of money increases by $10B. Thus, the money multiplier equals,
A) \( \frac{-10}{2} \)

18. Suppose the money multiplier is 6. If the Fed buys $1 million in securities, the quantity of money will
   c) increase by $6 Million. Remember, when the Fed buys securities (open market operations) the quantity of money banks have on hand to lend increases. This number multiplied by the money multiplier will lead to the increase in the quantity of money.

19. The quantity of money people choose to hold depends on which of the following?
   I. The price level
   II. Financial innovation
   III. The exchange rate
   A) I and II only. Four things influence the demand for money, they are the price level, the interest rate, real GDP, and Financial innovation.

22. The opportunity cost of holding money balances increases when,
   C) the interest rate rises. The opportunity cost of checkable deposits, or cash is the ability to earn interest in interest bearing accounts. When the interest rate rises, returns on these accounts increases, so the opportunity cost rises.

23. When the interest rate rises, the quantity of money demanded decreases because
   B) people shift funds from money holdings to interest bearing assets.
   We can see from question 22 why this is. The opportunity cost has increased, so people will jump at the chance to earn a higher return.

25. All of the following are examples of financial innovations that have decreased the demand for money EXCEPT
   C) Inflation
   Financial innovations are technologies that enable us to carry less money, like credit and debit cards. Inflation does not do this.

26. In the above figure, suppose the economy is initially on demand for money curve MD1. What is the effect of a rise in the interest rate?
   B) There would be a movement upward along the demand for money curve MD1. The money demand curve shows the relationship between interest rates and real money demanded. Thus, a change in the interest rate does not shift the money demand curve.
27. In the same figure, suppose the economy is initially on the demand for money curve MD1. What is the effect of increased use of credit cards?

D) The demand for money curve would shift leftward to MD0
This is an example of a financial innovation, or a change in technology. If people are using credit cards, they have less need for cash.

28. If the fed increases the monetary base,

B) a shift from the supply of money curve MS0 to the supply of money curve MS1
This represents a shift in the demand curve as interest rates have not changed. The shift will represent an increase in the demand for money.

29. If the fed lowers the required reserve ratio, the resulting change is,

B) a shift from the supply of money curve MS0 to MS1.
Lowering the required reserve ratio increases the monetary base, and the resulting shift is the same as question #28.

34) The Fed directly controls the
D) Discount Rate
The discount rate is one of the three tools the Fed has to adjust the quantity of money in the economy.

35) In general,

A) Short term interest rates move together
Short term rates are very flexible due to their short holding time. Thus, they can react to changes in the discount rate very quickly.