

1.) three functions of money are :
 · medium of exchange . Gold is asset that ppl not accept, so it's in store of value
 · store of value
 · unit of account

2.) money supply = currently + Demand deposit
 (narrow money) : 1000 + 1000
 (M1) = 2000 \$
 Money supply (M2) = M1 + saving and time deposits
 (broad money) : 2000 + 1000
 = 3000 \$

3.) Fractional Reserve System (FRS) is use goldsmiths and bank. In this system, only a fraction of deposit are backed by actual cash on hand and are available for withdrawal

4.) a. ratio of 20% means required reserve ratio (RR) that a percentage of total deposit → bank must keep as reserve at CB
 b. 100 + 200 = 300
 c. money multiplier = $\frac{1}{RR} = \frac{1}{20} = 0.05$
 d. total deposit = initial × money multiplier
 = 100 × $\frac{1}{20} = 5$
 e.
 f.

5.) three role of central bank are :
 · control the money supply : monetary policy to control interest rate
 · managing exchange rate & nation's foreign exchange reserves
 · lender of last resort : provides fund to trouble banks that cannot find any other source of funds.

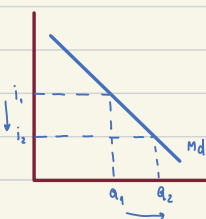
6.) Liquidity is how easily asset can be converted into a mean of exchange.
 · Money is the most liquid asset
 · Three reason why ppl prefer to have liquidity :
 · Transaction Demand (for daily use)
 · Precautionary Demand (for unexpected use)
 · Speculative Demand (for future investment)
 · Speculative Demand is a negative relationship between speculative demand, Interest Rate
 [$i \downarrow \rightarrow$ speculative demand \uparrow]

7.) a. Ppl become poorer : M_d will shift to the left, then money demand curve shift to the left too that make quantity of money decrease.
 b. Good become more expensive : M_d 'll shift to the right, then money demand curve shift to the right that make quantity of money increase.
 c. hold less cash : M_d 'll shift to the left, then money demand curve shift to the left too that make quantity of money decrease.
 d. CB decrease interest rate : M_d 'll move down, then it make quantity of money more bc ppl 'll spend more money

8.) a. people deposit more money : it will shift to the left, quantity of money will decrease : ppl don't want to hold cash
 b. The central bank increase reserve ratio it will shift to the left, quantity of money will decrease
 c. The central bank decrease discount rate : it will shift to the left, quantity of money will decrease.
 d. The central bank decrease interest rate : it will shift to the right, quantity of money will increase

9) When central bank decrease interest rate that make ppl hold more cash. it will boost economy that ppl will use more money

Open market operation: the purchase & sale by the CB of govt securities in the open market



· CB buy securities \rightarrow CB pay money to public \rightarrow $M_s \uparrow$

· CB sells securities \rightarrow CB take money from the public \rightarrow $M_s \downarrow$

10) if $i > i^*$, you should to reduce interest rate because it's excess supply of money (too much cash on hand)

· ppl convert cash into interest-bearing asset / buy bonds

· too much money offered to bond issue

· Bond issues need to reduce i that can adjust i to i equilibrium

11) Quantity Theory of Money: show the relationship between Money supply & Inflation

$$MV = PY$$

M = money supply

P = Price level

v = Velocity

Y = Real Output

PY = Nominal Output

· Increase in money supply lead to an increase in price level

· Printing money create inflation

12) a. find i^* ; $M_D = 200 - 1000i$

$$M_S = 100$$

$$M_D = M_S$$

$$200 - 1000i = 100$$

$$100 = 1000i$$

$$0.1 = i$$

b. If $M_D = 400 - 1000i$; 400 is changing of transaction and precautionary demand.