Consider the following numerical version of the IS-LM model in a closed economy:

 C=400+0.5Yd; I=700-4000r+0.1Y; G=200; TP=200; Yd=Y-TP

 RLMD=0.5Y-7500r; RLMS =500; X=M

Find the equations for the IS curve and LM curve

Solve for equilibrium real output (Y), interest rate (r), consumption (C), and Investment (I)

If government spending increased to 700, solve again for the equilibrium Y, r, C, and I.

Suppose that the unemployment benefits are increased permanently, please answer the following questions (Hint: using the AD-AS model to analyze the impacts):

1. What will happen to Y (GDP), r (real interest rate), P(price level), and I(investment), in the short run ?The answer should indicate will these values increase or decrease in the short run.
2. What will happen to Y, r, P, and I, in the long run?The answer should indicate will these values increase or decrease in the long run.

In the flexible exchange rate system, discuss the effects of the following events on the exchange rate between U.S. dollar and Japanese Yen: **Please indicate whether US$ will appreciate or depreciate.**

1. Other things being equal, the trade deficit between U.S. and Japan increased, or the U.S. imports from Japan increased faster than U.S. exports to Japan.
2. Other things being equal, the U.S. real interest rate increased faster than Japanese real interest rate.

Assuming an economy can be represented by the following simplified model (all values are measured in $billion):

C=200+0.5Yd, I=100, G=150, TP=100, X=M, Yd=Y-TP

Please discuss the impacts of a $20 billion tax (TP decrease by 20) cut on equilibrium Y (GDP) and C (personal consumption).