Student ID.................................

EE212 Principles of Macroeconomics, 2/2017 (Sec. 046402-Sicha)

Homework 6

Chapter 3. National Income Equilibrium

Please submit at the BE office, 5th floor department of Economics building.
Deadline of submission : March 6, 2018, before 15.00 hrs. Late submission will not be accepted.

1. Consider the following economy and answer all questions.

$$
\begin{aligned}
C &= 210 + 0.8Y_d, \\
T &= 20, \\
G &= 44 \\
I &= 22 + 0.02Y \\
X &= 155 \\
M &= 15 + 0.07Y
\end{aligned}
$$

$$
\begin{aligned}
DAE &= C + I + G + (X - M) \\
&= 210 + 0.8(Y - T + R) + 22 + 0.02Y + 44 + 155 - (15 + 0.07Y) \\
&= [210 - 0.8(20) + 0.8(0) + 22 + 44 + 155 - 15] + (0.8 + 0.02 - 0.07)Y \\
DAE &= [210 - 0.8(20) + 0.8(0) + 22 + 44 + 155 - 15] + 0.75Y \\
&= [400] + 0.75Y
\end{aligned}
$$

(a) Find Equilibrium National Income.
....
....
....

(b) Find all multipliers in this economy

investment multiplier$=k_I = \dfrac{\Delta Y}{\Delta I_a} =$ ....

consumption multiplier$=k_C = \dfrac{\Delta Y}{\Delta C_a} =$ ....

government expenditure multiplier$=k_G = \dfrac{\Delta Y}{\Delta G_a} =$ ....

export multiplier$=k_X = \dfrac{\Delta Y}{\Delta X_a} =$ ....

import multiplier$=k_M = \dfrac{\Delta Y}{\Delta M_a} =$ ....

(c) Based on the solution from question (**a**) and (b), what happen to the equilibrium output if investment rises from 22 to 122?
....
....
....
....

(d) Based on the solution from question (**a**) and (b), what happen to the equilibrium output if Tax rises from 20 to 30?
....
....
....
....

(e) Based on the solution from question (**a**) and (b), what happen to the equilibrium output if Government expenditure rises by 20 units?

....
....
....
....
....

(f) Based on the solution from question (**a**) and (b), what happen to the equilibrium output if Import rises by 40 units?

....
....
....
....
....

2. Consider the economy with

$$\begin{aligned} C &= C_a + bY_d, \\ T &= T_a + tY, \\ G &= G_a \\ I &= I_a + i.Y \\ X &= X_a \\ M &= M_a + m.Y \end{aligned}$$

$$DAE = C_a - bT_a + I_a + G_a + (X_a - M_a) + (b - bt + i - m)Y$$

(a) Find Equilibrium National Income.

....
....
....

(b) Find all multipliers in this economy

investment multiplier$=k_I = \dfrac{\Delta Y}{\Delta I_a} =$ ....

consumption multiplier$=k_C = \dfrac{\Delta Y}{\Delta C_a} =$ ....

government expenditure multiplier$=k_G = \dfrac{\Delta Y}{\Delta G_a} =$ ....

export multiplier$=k_X = \dfrac{\Delta Y}{\Delta X_a} =$ ....

import multiplier$=k_M = \dfrac{\Delta Y}{\Delta M_a} =$ ....