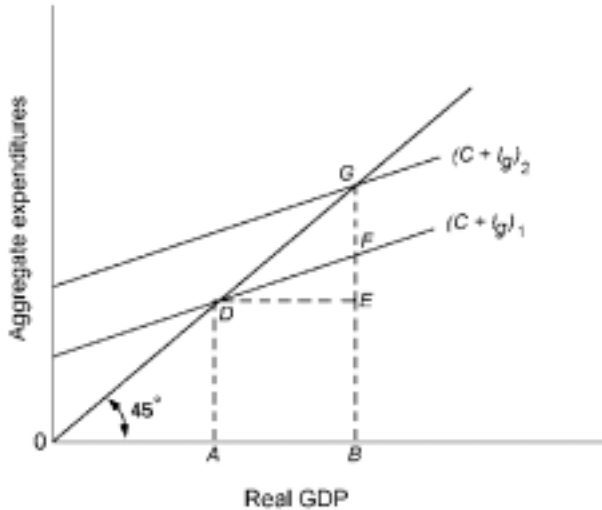


**Economics 152**  
**Problem Set 4**

**PART 1 ( 3 POINTS)**

Use the following to answer questions 1-3:



1. Refer to the above diagram for a private closed economy. The marginal propensity to consume is:  
A)  $GF/DE$ . B)  $GE/DE$ . C)  $FE/DE$ . D)  $DE/FE$ .
2. Refer to the above diagram for a private closed economy. The shift of the aggregate expenditures schedule from  $(C + I_g)_1$  to  $(C + I_g)_2$  reflects:  
A) an increase in investment expenditures. C) an increase in the MPC.  
B) a decrease in consumption expenditures. D) an increase in the APS.
3. Refer to the above diagram for a private closed economy. The multiplier is:  
A)  $DE/GF$ . B)  $GE/DE$ . C)  $FE/DE$ . D)  $DE/FE$ .

**PART 2 ( 2 POINTS)**

Use the following to answer questions 4-5:

Complete the following table and answer the next question(s) on the basis of the resulting data. All figures are in billions of dollars.

	Aggregate Domestic expenditures, output <u>(GDP = PI)</u>	Aggregate expenditures, closed economy	<u>Exports</u>	<u>Imports</u>	Net <u>exports</u>	Aggregate expenditures, open economy
	\$200	\$230	\$30	\$20	\$_____	\$_____
	250	270	30	20	_____	_____
	300	310	30	20	_____	_____
	350	350	30	20	_____	_____
	400	390	30	20	_____	_____
	450	430	30	20	_____	_____
	500	470	30	20	_____	_____

4. If the above economy was closed to international trade, the equilibrium GDP would be:

- A) \$300   B) \$400   C) \$450   D) \$350

5. Refer to the above table. For the open economy the equilibrium GDP will be:

- A) \$300   B) \$400   C) \$450   D) \$350



d) Represent the initial and new equilibrium using the “Keynesian Cross” diagram.

e) Represent the initial and new equilibrium using the “Saving-Investment” diagram.

**PART 4 ( 10 POINTS)** Answer the following questions.

2. Suppose you now have a government sector in the economy so that the economy is described by the following set of equations. (C, I,  $Y_D$ , and G are all in billions of dollars). ( $Y_D$  is disposable income).

$$C = 135 + 0.8 Y_D$$

$$Y_D = Y + 50 - 0.25Y$$

$$I = 75$$

$$G = 40$$

$$Y = C + I + G$$

- a) Compute the equilibrium level of income or GDP (Y). ( **1 Point**)
- b) Calculate the multiplier for this economy. ( **1 Point**)
- c) Compare this multiplier with the multiplier obtained in the closed economy with no government. Which of the two multipliers are larger? Why? ( **2 Points**)

c) Suppose that private domestic investment increases to 100. Recompute the new equilibrium GDP. **(2 Points)**

d) Represent the initial and new equilibrium using the “Keynesian Cross” diagram. **(2 Points)**

d) Suppose the tax rate is cut from 25% to 15%. Show the new equilibrium using the “Keynesian Cross” diagram. **(2 Points)**

**Answer Key -- ProblemSet4**

1. C
2. A
3. A
4. D
5. B