

$$MPC = \frac{\Delta C}{\Delta Y_d}$$

$$MPS = \frac{\Delta S}{\Delta Y_d}$$

Student ID:.....

Question 9

Answer the following questions.

$$MPS = 0.25$$

Country A is a closed economy with no government. The marginal propensity to save in the country is 0.25.

9.1 Calculate the value of the (investment) multiplier. $Y = AE = C + I$ $I = S$

$$MPS + MPC = 1$$

$$MPC = 0.75$$

$$\frac{\Delta Y^*}{\Delta I} = \frac{1}{1 - MPC} = \frac{1}{1 - 0.75} = \frac{1}{0.25} = 4$$

$$0.25 + MPC = 1$$

9.2 Due to the initial investment made by firms and the multiplier effect, the (equilibrium) output in the economy has increased by \$200m. Calculate the value of the initial investment.

$$\Delta Y = \frac{1}{0.25} (\Delta I)$$

$$\Delta I = 50$$

$$200 = \frac{1}{0.25} (\Delta I)$$

$$Y^* = 200$$

Country B is an open economy with government.

9.3 Do you think the multiplier effect in Country B will be larger than that of Country A? Why or why not?

When country B is open economy with government the multiplier will be larger effect than country A because when you open economy the multiplier will be larger than close economy and it will lead to larger fluctuations.