

South valley university ,

Faculty of commerce ,

Economic department .

Macro Economics

Prof. Dr.

Gamal Ibraheem Hassan

For each item , determine whether the statement is basically true (T) or false (F) .

- 1) the national income represents the total earnings arising from the production of the gross national product .()
- 2) corporate profits are included in total personal income in GNP accounting figures .()
- 3) as income increases , the size of multiplier generally increases .()
- 4) as multiplier increases , the amount of income spent on consumption decreases ()
- 5) it is more accurate to base the multiplier on the marginal propensity to consume than it is to base it upon the average propensity to consume ()
- 6) the multiplier effect can take place on an increment of government spending as well as on an increment of private investment ()
- 7) the accelerator is concerned primarily with the measurement of secondary investment rather than the measurement of autonomous investment ()
- 8) if the multiplier is 3 and the estimated GNP for a given year is \$4,500 billion but a GNP of \$ 4650 billion is required to obtain full employment is \$30 billion ()
- 9) the relationship between an increase in autonomous investment and the total increase in income resulting from the interaction of the multiplier and accelerator is known as the super multiplier ()
- 10) the size of the labor force times hours per worker times productivity per work-hour equals the potential GNP for the economy . ()
- 11) with such complications produced by government removed , NNP will equal national income .(T)
- 12) set of taxes causes NI to fall short of NNP , and just because of depreciation NNP falls short of GNP . ()
- 13) a part of consumption that depends on household income is called endogenous consumption (T)

- 14) taxes paid to the government exceed transfer payment from the government , net taxes are usually positive (T)
- 15) a change in GNP will change disposable income and endogenous consumption (T)
- 16) when GNP is larger than planned consumption plus taxes , planned saving is positive ()
- 17) when GNP is less than planned consumption plus taxes , planned saving is positive ()
- 18) when GNP is equal planned consumption plus taxes , planned saving is zero ()
- 19) firms "draw down" on their inventories when their sales exceed what they had anticipated (T)
- 20) firms "build up" their inventories unexpectedly when their sales fall short (T)
- 21) current investment is largely independent of firm's current sales (T)
- 22) one half to three fourths of total investment in recent years falls into category of replacement or depreciation (T)
- 23) high consumption level necessarily means a low saving level ()
- 24) if the marginal propensity to save equals 0.40 , a person spends 60 percent of income . ()
- 25) an increase in taxes shifts the aggregate expenditure schedule upward ()
- 26) exogenous consumption is the level of consumption if GNP equals zero ()
- 27) the larger the MPC , the lower the multiplier , certis paribus . ()
- 28) the vertical intercept of the consumption function is the level of endogenous consumption . ()
- 29) the consumption function crosses the 45 line where planned consumption equals planned saving . ()
- 30) .If the value of output by citizens outside the country is greater than the value of output by foreigners inside the country, GNP will be less than GDP. ()

- 31) GNP may equal GDP. ()
- 32) **Consumption function refers to a relationship between income levels and amounts spent on consumption (T)**
- 33) **exogenous consumption , this variable is not related to income , and occur when $Y = 0$ (T)**
- 34) **Saving function_ , “shows the relationship between income levels and amounts saved from income “ (T)**
- 35) The fraction or percentage of any given total income which is consumed is called (APC) . (T)
- 36) The fraction or percentage of any given total income which is saved is called (APS) . (T)
- 37) The fraction or percentage of any change in income which is consumed is called (MPC) . (T)
- 38) The fraction or percentage of any change in income which is saved is called (APS) . (T)
- 39) When taxes paid to the government exceed transfer payments from the government , net taxes are negative .(F)
- 40) When GNP equal planned consumption , planned saving equal zero .(T)
- 41) When GNP is larger planned consumption , planned saving equal negative .(F)
- 42) When GNP is less than planned consumption , there is a dissaving (T)
- 43) Total planned investment , government expenditure and net exports as a constant amount , which does not vary with GNP . (T)
- 44) As income increases , the amount of income spent on consumption decreases ()
- 45) As income increases , the size of multiplier generally increases .()

Choose the correct answer from the following :-

1- The gross national product minus capital consumption allowance equals .

- a. Disposable income
- b. Personal income
- c. Net national product
- d. National income

2- If the GNP is reported at \$4,500 billion and the price level at \$ 340 , the real GNP , that is , the GNP in constant dollars , will be .

- a. \$662 billion
- b. \$1,324 billion
- c. \$2,648 billion
- d. \$6,300 billion

3- The gross national product measures the value of

- a. Final goods and services
- b. Both intermediate and final products
- c. Intermediate product only
- d. Services only

4- If the total production of goods and services for a given quarter of the year is \$ 1,200 billion seasonally adjusted , the GNP would be reported at an annual rate of

- a. \$1,200 billion
- b. \$2,400 billion
- c. \$3,600 billion
- d. \$4,800 billion

5- Which of the following represents a transfer payment ?

- a. Payment to a company for moving expenses
- b. Payment to an importer
- c. Social security pension payment
- d. Post clerk's salary

6- Assume a total disposable income of \$ 2,200,000,000 , a population of 230,000 and a price level of 100 in a given year . if the total disposable income is increased by 50 percent , the population by 10 percent , and the price level by 25 percent in eight years , the real per capita disposable income at the end of the period will be approximately

- a. \$5,000
- b. \$8,000
- c. \$10,500
- d. \$12,500

7- As income increases , the

- a. Marginal propensity to consume decreases
- b. Marginal propensity to consume increases
- c. Marginal propensity to consume remains constant
- d. Marginal propensity to save decreases

8- In the multiplier formula $1 - \Delta C / \Delta Y$ equals the

- a. Average propensity to consume
- b. Marginal propensity to consume
- c. Average propensity to save
- d. Marginal propensity to save

9- If the investment increases by \$ 20 billion and the GNP as a result increases by \$ 40 billion , the multiplier is

- a. 5
- b. 4
- c. 2
- d. 1/2

10- The multiplier is equal to the reciprocal of the

- a. Average propensity to consume
- b. Marginal propensity to consume
- c. Average propensity to save
- d. Marginal propensity to save

11- If the marginal propensity to consume were $\frac{2}{3}$, the multiplier would be

- a. $2 \frac{1}{2}$
- b. 2
- c. $1\text{-}\frac{2}{3}$
- d. 3

12- Assume a marginal propensity to consume of $\frac{3}{4}$; if private investment decreased by \$10 billion , government spending increased by \$13 billion , the GNP would

- a. Decrease by \$8 billion
- b. Increase by \$ 3 billion
- c. Increase by \$12 billion
- d. Increase by \$ 32 billion

13- If the multiplier based on the average propensity to consume were 3 to sustain an economy GNP of \$ 4,500 billion , it would require a total investment and /or government spending of

- a. \$300 billion
- b. \$1,000 billion
- c. \$1,200 billion
- d. \$ 1,500 billion

14- The purpose of the income-expenditure analysis is to explain what determines

- a. The size of the labor force
- b. The amount of money required in the economy
- c. The price level
- d. The level of employment

15- According to income-expenditure analysis , all production in excess of that which is currently consumed is referred to as

- a. Forced saving
- b. Investment
- c. Hoarding

- d. Conspicuous consumption

16- According to income-expenditure analysis , unemployment results from

- a. Underinvestment
- b. Over consumption
- c. Overinvestment
- d. Under consumption

17- If the marginal efficiency of capital is higher than the rate of interest , it will cause the inducement to invest to

- a. Decline and then rise
- b. Decrease
- c. Remain stable
- d. Increase

18- In deciding whether to expand or contract investment , investors are usually guided by

- a. Liquidity preference
- b. Interest rates
- c. Profit expectations
- d. Past profits

19- The classical theory holds that in an exchange or barter economy

- a. Demand is generally greater than supply
- b. Supply is generally greater than demand
- c. Supply creates its own demand
- d. The demand and supply for a particular good will be equal

20- The classical theory states that an increase in consumption will generally result in

- a. A reduction of investment
- b. An increase in investment
- c. A stable investment
- d. A rise and then a decline in investment

21- One of the major difference between the income-expenditure analysis and the classical theory is that the classical theory assumes

- a. A free enterprise economy
- b. Full employment for labor and resources
- c. An agricultural economy
- d. A constant money supply

22- According to income-expenditure analysis , the point of effective demand must necessarily

- a. Recede as income increases
- b. Correspond to the full employment level
- c. Be a point somewhat less than full employment
- d. Be none of the above

23- A fundamental principle of the income-expenditure analysis is that as the real income of a commodity increases ,

- a. The percentage of income spent on consumption will increase
- b. Consumption will increase in proportion to the increase in income
- c. The marginal propensity to consume will decline
- d. The amount of consumption will decrease

24- According to the income-expenditure analysis , provided that the propensity to consume and government spending remain unchanged , employment cannot decrease unless

- a. Investment decreases
- b. Investment increases
- c. The marginal efficiency of capital increases
- d. The money supply increases

25- Among all the terms used in the income-expenditure analysis , the three that stand out above all the rest as the strategic , independent variable are

- a. The rate of interest the marginal efficiency of capital and the inducement to invest
- b. The propensity to Consume the rate of interest and the accelerator
- c. The propensity to consume the rate of interest and the marginal efficiency of capital
- d. The propensity to consume the multiplier and liquidity preference

26- The marginal efficiency of capital is most likely to increase if

- a. The rate of interest increases
- b. Prices fall
- c. Sales increase
- d. The money supply decreases

27- Business cycle can be described as

- a. Fluctuations around a norm
- b. Changes in economic activity due to natural causes
- c. Increases in the level of business activity over an extended period of time
- d. Changes in business activity due to wars

28- Which of the following is considered as an exogenous (external) force in business fluctuations ?

- a. Psychological outlook
- b. Devaluation of currency
- c. Inventories
- d. Rate of interest

29- In the pattern of the business cycle generally

- a. Wages and prices move inversely
- b. Wages and prices move simultaneously
- c. Wages lead prices
- d. Wages lag behind prices

30- NI is _____ NNP

- a. Less than
- b. Equal to
- c. Greater than

31- _____ is a measure of the total of incomes which people can actually dispose of (spend or save) as they wish

- a. National income
- b. Net national income
- c. Personal income
- d. Disposable income

32- A high marginal propensity to consume implies which of the following?

- a. A small change in consumption when income changes
- b. A high savings rate (C) A high marginal tax rate
- c. An equilibrium level of income near full employment
- d. A low marginal propensity to save

33- Planned investment depends on :

- a. Current sales
- b. Interest rate
- c. Taxation policy
- d. Past production
- e. A&B&C
- f. B&C&D&

34- Investment is horizontal means that investment _____

- a. Change with current output
- b. Change with past output
- c. Don't Change with current output
- d. Don't Change with past output

35- _____ is the residual after taxes and consumption are removed from total income .

- a. Dissaving

- b. Saving
- c. Consumption
- d. Non of the above

36- Change in consumption divided by the change in disposable income .

- a. MPC
- b. MPS
- c. Slope of the consumption function
- d. a & c

37- which of the following is true :

- a. $MPC = MPS$
- b. $MPC \geq MPS$
- c. $MPC \leq MPS$
- d. $MPC + MPS = 1$

38- When consumption function is $C = 100 + 0.8 (Y - T)$, then the saving function is

- a. $S = -100 + 0.2 (Y - T)$
- b. $S = 100 - 0.2 (Y - T)$
- c. $S = 100 + 0.8 (Y - T)$
- d. $S = -100 - 0.8 (Y - T)$

39- The multiplier equals 2 for the economy when

- a. The MPC and MPS are equal
- b. The marginal propensity to save is 0.2
- c. An increase in planned investment leads to an equal increase in equilibrium GNP
- d. The marginal propensity to consume is 0.2

40- Equilibrium GNP exists in the macroeconomics when

- a. There is full employment
- b. The level of prices is not changes
- c. Intended production levels match intended aggregate expenditures
- d. All of the above occur simultaneously

41- A nation's gross domestic product (GDP):

- a. is the dollar value of the total output produced within the borders of the nation.
- b. is the dollar value of the total output produced by its citizens, regardless of where they are living.
- c. can be found by summing $C + I + S + X_n$.
- d. is always some amount less than its $C + I + G + X_n$.

42- Suppose the total market value of all final goods and services produced in a particular country in 2004 is \$500 billion and the total market value of final goods and services sold is \$450 billion. We can conclude that:

- a. GNP in 2004 is \$450 billion.
- b. GNP in 2004 is \$500 billion
- c. NNP in 2004 is \$450 billion.
- d. inventories in 2004 fell by \$50 billion

43- National income accountants can avoid multiple counting by:

- a. including transfers in their calculations.
- b. only counting final goods.
- c. counting both intermediate and final goods.
- d. only counting intermediate goods.

44- GNP differs from NNP in that:

- a. GNP is based on gross exports, while NNP is based on net exports.
- b. GNP includes, but NNP excludes, indirect business taxes.
- c. net investment is used in calculating GNP and gross investment is used in calculating NNP.
- d. gross investment is used in calculating GNP and net investment is used in calculating NNP

45- Which of the following best defines national income?

- a. income received by households less personal taxes
- b. the before-tax income received by households
- c. all incomes earned by U.S. resource suppliers for their current contributions to production
- d. the market value of the annual output net of consumption of fixed capita

46- What does cyclical unemployment refer to?

- a. People who don't have jobs because of choice
- b. Students who just graduated from college
- c. Firms that hire workers and then fire them because of poor performance
- d. The part of the labor force that is unemployed due to the expansion phase of the business cycle
- e. None of the above

47- What is the difference between cyclical unemployment and structural unemployment?

- a. Cyclical happens during the contraction phase, and structural occurs because of a lack of skills.
- b. Cyclical happens during the expansion phase, and structural pertains to those just graduating from college.
- c. Cyclical happens during the peak phase, and structural describes discouraged workers.
- d. Cyclical and structural occur in the contraction phase only.
- e. None of the above.

48- A perfect definition of unemployment :

- a. Unemployed worker is willing to work for a reasonable wage .
- b. Unemployed worker is looking for an realistic job in light of current opportunities .

49- Suppose that the consumption function
 $C = 200 + 0.6 Y$, What would be the formula of saving .

- a. $S = -200 + 0.6 Y$
- b. $S = -200 + 0.4Y$
- c. $S = 200 + 0.4 Y$
- d. None of the above

50- The part of consumption that depends on household income is called

- a. Exogenous consumption
- b. Endogenous consumption
- c. Multiplier
- d. None of the above

51- Government spending is logically treated as exogenous to real GNP because

- a. It does not change directly with increased or decrease in current .
- b. It does not change very much with changes in the interest rate .
- c. Much of government spending simply redistributes incomes .
- d. All of the above .

52- As income increases , the

- a. Marginal propensity to consume decreases
- b. Marginal propensity to consume increases
- c. Marginal propensity to consume remains constant
- d. Marginal propensity to save decreases

53- If the investment increases by \$20 billion and GNP as a result increases by \$40 billion , the value of the multiplier is

- a. 5
- b. 4
- c. 2
- d. 1/2

54- The multiplier is equal to the reciprocal of the

- a. Average propensity to consume
- b. Average propensity to save
- c. Marginal propensity to consume
- d. Marginal propensity to save

55- If the marginal propensity to consume were $\frac{2}{3}$, the multiplier would be .

- a. 2,5
- b. 2
- c. $1-\frac{2}{3}$
- d. 3

56- Assume a marginal propensity to consume of $\frac{3}{4}$; if private investment decreased by \$10 billion and government spending increased by \$ 13 billion , the GNP would

- a. Decreases by \$18 billion
- b. Increases by \$ 3 billion
- c. Increases by \$ 12 billion
- d. Increases by \$32 billion

57- If the multiplier based on the average propensity to consume were 3 , to sustain an economy with a GNP of \$4500 bollion , it would require a total investment and/or government spending of

- a. \$3000 billion
- b. \$1000 billion
- c. \$ 10000 billion
- d. \$1500 billion

58- In consumption line $C = a + b.Y$, what does 'b' denotes?

- (a) Multiplier of Income
- (b) MPS
- (c) Slope of consumption line

(d) C/Y

59- What will be the value of multiplier if MPC is 0.5 ?

(a) 0.5

(b) 1

(c) 2

(d) 5

60- The APC is calculated as:

a. change in consumption / change in income

b. change in income / change in consumption

c. consumption / income

d. income / consumption

61- The consumption schedule shows:

a. a direct relationship between aggregate consumption and accumulated wealth.

b. a direct relationship between aggregate consumption and aggregate income.

c. an inverse relationship between aggregate consumption and accumulated financial wealth.

d. an inverse relationship between aggregate consumption and aggregate income.

62- The APC can be defined as the fraction of a:

a. change in income that is not spent.

b. change in income that is spent.

c. specific level of total income that is not consumed

d. specific level of total income that is consumed.

63- Which of the following is correct?

a. APC + APS = 1.

b. APS + MPC = 1.

c. APS + MPS = 1.

d. APC + MPS = 1

64- The size of the MPC is assumed to be:

- a. less than zero.
- b. greater than one.
- c. greater than zero, but less than one.
- d. two or more.

65- If the MPC is .8 and disposable income is \$200, then

a. consumption and saving cannot be determined from the information given.

- b. saving will be \$20.
- c. personal consumption expenditures will be \$80.
- d. saving will be \$40.

66- The MPC for an economy is:

- a. the slope of the consumption schedule or line
- b. the slope of the savings schedule or line.
- c. 1 divided by the slope of the consumption schedule or line.
- d. 1 divided by the slope of the savings schedule or line.

67- Which of the following is correct?

- a. $MPC + MPS = APC + APS$
- b. $APC + MPC = APS + MPS$
- c. $APC + MPS = APS + MPC$
- d. $APC - APS = MPC - MPS$

68- . At the point where the consumption schedule intersects the 45-degree line:

- a. the MPC equals 1.
- b. the APC is zero.
- c. saving equals income.
- d. saving is zero.

69- If the marginal propensity to consume is 0.9, then the marginal propensity to save must be:

- a.** 1.
- b.** 0.1.
- c.** 1.1.
- d.** 0.9.

Problem 1 :-

Suppose that the linear for consumption a hypothetical economy is

$$C = 40 + 0.8 Y$$

And also suppose that income (Y) is \$ 400

Determine :-

- 1) The marginal propensity to consume (MPC)
- 2) The marginal propensity to save (MPS)
- 3) The level of consumption
- 4) The average propensity to consume
- 5) The level of saving the average propensity to save .

Problem 2 :-

Completion :-

- 1) Assume :

	Y	=	C	+	S
Period 1	\$ 4,600	=	\$ 3,600	+	\$ 1,200
Period 11	\$ 4,920	=	\$ 3,680	+	\$ 1,240

Find :-

- a. The average propensity to save in period 1 _____
- b. The marginal propensity to consume _____

c. The size of multiplier _____

Problem 3 :-

Suppose the consumption function :

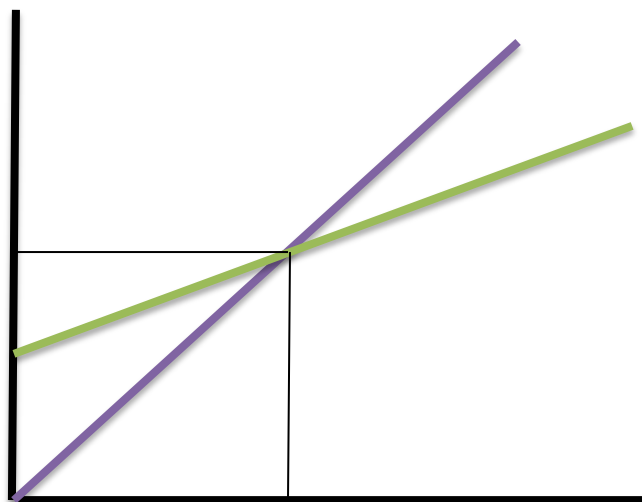
$$C = 100 + 0.8 Y$$

Suppose also the investment is constant and equal 30

Required :

- 1) Determine the total income (Y)
- 2) Compute the form and value the simple multiplier
- 3) Verify the equilibrium on macroeconomic level
- 4) Present your answer graphically
- 5) Suppose to rise the total income the government added $\Delta I = 10$, Compute the total income and present graphically

Problem 4:-



From the figure determine :-

- 1- consumption function
- 2- if the investment 80 compute Y
- 3- confirm the equilibrium condition
- 4- present graphically

Problem 5:-

For all step answer the following requires :-

- | | |
|-------------------------------|------------------------------|
| 1-
(Y) | Compute the national income |
| 2-
multiplier | Determine the form and value |
| 3-
equilibrium situation . | Verify the general economic |
| 4-
graphically . | Present your answer |

First stage :

The close economy and no government

$$C = 300 + 0.8 Y$$

$$I = 100$$

Second stage :-

$$G = 50$$

$$T = 30 + 0.25 Y$$

Third stage :-

$$X = 40$$

$$M = 40 + 0.1 Y$$

Problem 6:-

given the following (in billions of dollars)

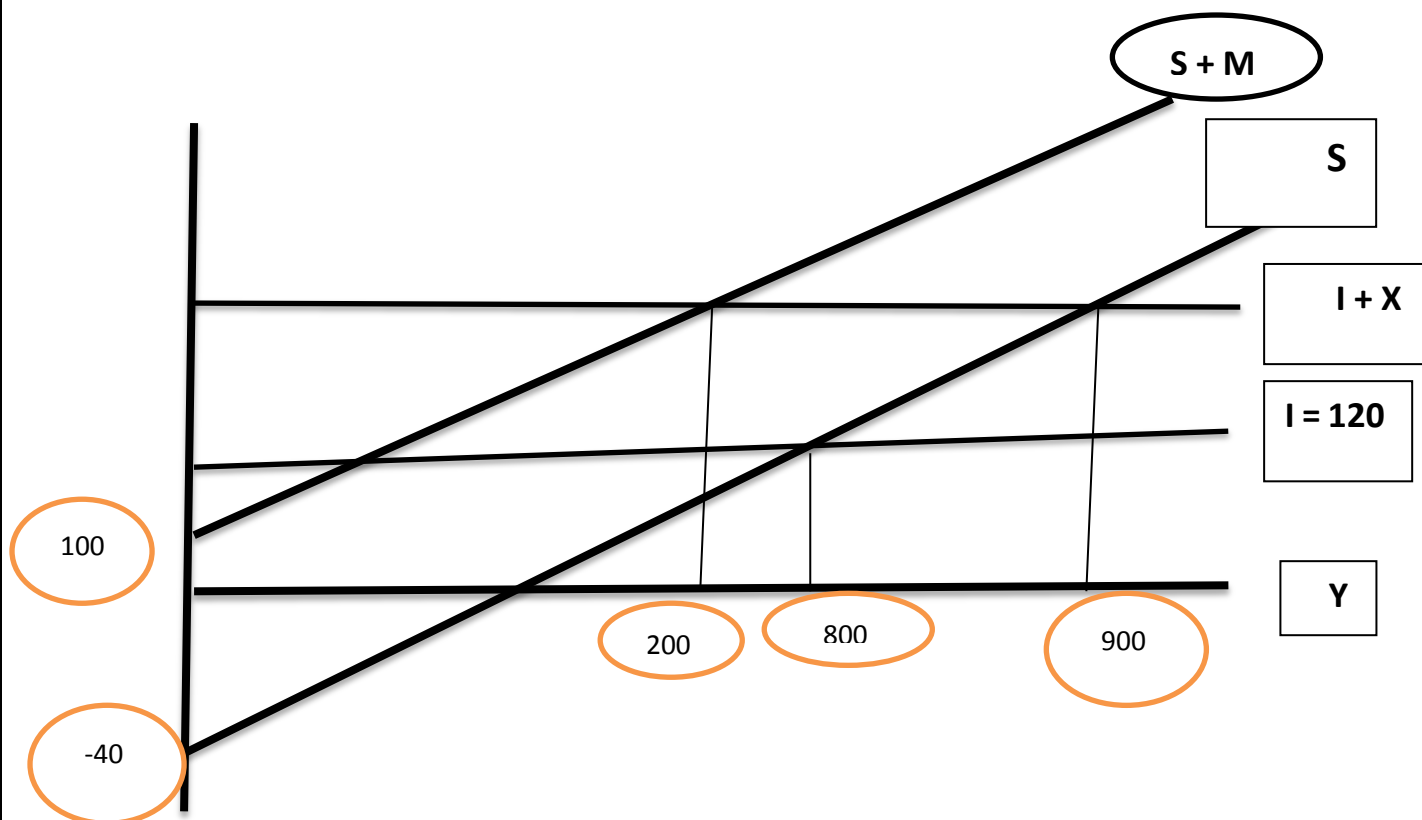
<u>Income</u>	<u>Consumption</u>	<u>Saving</u>
1000	1200	
2000	1900	
3000	2600	
4000	3300	
5000	4000	

- 1- Calculate saving at each level of income and add it to the third column above .
- 2- Graph the consumption function . include the 45 line in your graph . what is the slope of the consumption functions ?
- 3- Graph the saving function .
- 4- What is the slope of the saving function ? at approximately what level of income is saving zero ?
- 5- write equation for the consumption function and saving function .

problem 7:-

from the information in the below graphic find the following requires :

- 1- Write the consumption function .
- 2- National income when saving level equal zero
- 3- Volume of export (X)
- 4- Write the import function
- 5- The forign trade multiplier .



Problem 8:-

	Year 1	Year 2
New building	40	40
New equipment	60	60
Consumer goods consumed	430	310
Consumer goods produced	370	430
Depreciation of building	15	15
Depreciation of equipment	15	15
Inventory at beginning	100	120
Inventory at closing	120	100

1- Calculate GNP and NNP in year 1 & year 2

Problem 9:-

Compensation of employees	<u>100</u>
Exports of goods and services	<u>20</u>
Capital consumption allowance	<u>15</u>
Government purchases	<u>20</u>
Indirect taxes	<u>65</u>
Net private domestic investment	<u>30</u>
Transfer payment	<u>75</u>
Personal taxes	<u>20</u>
Imports of goods and services	<u>25</u>
Consumption expenditure	<u>20</u>
Personal saving	<u>240</u>
Interest paid by consumer	<u>40</u>
Subsidies	<u>20</u>

1- Calculate GNP , NNP , NI , DI

Problem 10 :-

<u>Business and industrial plan</u>	<u>100</u>
<u>Capital consumption allowance</u>	<u>40</u>
<u>distributed profit</u>	<u>30</u>
<u>Corporation's profit before tax</u>	<u>90</u>
<u>Government purchased of goods and services</u>	<u>150</u>
<u>Government transfer payment</u>	<u>30</u>
<u>Housing constructed</u>	<u>40</u>
<u>Increasing in inventories</u>	<u>-15</u>
<u>Interest by business</u>	<u>20</u>
<u>Interest by government</u>	<u>10</u>
<u>Interest by consumer</u>	<u>35</u>
<u>Consumption expenditure</u>	<u>50</u>
<u>Proprietor's income</u>	<u>40</u>
<u>Rental income</u>	<u>25</u>
<u>Tax corporation's income</u>	<u>45</u>
<u>Indirect taxes</u>	<u>35</u>
<u>Personal tax</u>	<u>80</u>
<u>Social insurance contributions</u>	<u>25</u>

Required :-

- 1- calculate GNP , NNP , NI , DI
- 2- calculate gross investment and net investment
- 3- calculate the personal saving
- 4- calculate the wages and salaries
- 6- calculate the Undistributed profit
- 7- corporation income (profit) after tax