

Intermediate Macroeconomics

Second Year

Section (1) Revision

Q1: MCQ

Open economy

1. Net exports are:

- A) that portion of consumption and investment goods sent to other countries.
- B) exports plus imports.
- C) exports less imports.
- D) imports less exports.

Answer: C

2. Imports have the same effect on the current size of GDP as:

- A) exports. B) investment. C) consumption. D) saving.

Answer: D

3. Exports have the same effect on the current size of GDP as:

- A) imports. B) investment. C) taxes. D) saving.

Answer: B

4. At the equilibrium GDP for an open economy:

- A) net exports may be either positive or negative.
- B) imports will always exceed exports.
- C) exports will always exceed imports.
- D) exports and imports will be equal.

Answer: A

5. Other things equal, if a change in the tastes of American consumers causes them to purchase more foreign goods at each level of U.S. GDP:

- A) unemployment will decrease domestically.
- B) U.S. GDP will fall.
- C) inflation will occur domestically.
- D) U.S. real GDP will rise.

Answer: B

Use the following to answer questions 6-8

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

Domestic output (GDP = PI)	Aggregate expenditures closed economy	Exports	Imports	Net Exports	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	_____	_____

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

A) \$300 and 5. B) \$350 and 4. C) \$400 and 4. D) \$350 and 5.

Answer: D

7. Refer to the above table. For the open economy the equilibrium GDP and the multiplier are:

A) \$300 and 2.5. B) \$450 and 5. C) \$400 and 4. D) \$400 and 5.

Answer: D

8. If net exports decline from zero to some negative amount, the aggregate expenditures schedule would:

A) shift upward.
B) shift downward.
C) not move (net exports do not affect aggregate expenditures).
D) become steeper.

Answer: B

9. An upward shift of the aggregate expenditures schedule might be caused by:

A) a decrease in exports, with no change in imports.
B) a decrease in imports, with no change in exports.
C) an increase in exports, with an equal decrease in investment spending.
D) an increase in imports, with no change in exports.

Answer: B

10. Other things equal, an increase in an economy's exports will:

- A) lower the marginal propensity to import.
- B) have no effect on domestic GDP because imports will change by an offsetting amount.
- C) decrease its domestic aggregate expenditures and therefore decrease its equilibrium GDP.
- D) increase its domestic aggregate expenditures and therefore increase its equilibrium GDP.

Answer: D

11. If the dollar appreciates relative to foreign currencies, we would expect:

- A) the multiplier to decrease.
- B) a country's exports and imports to both fall.
- C) a country's net exports to rise.
- D) a country's net exports to fall.

Answer: D

12. If a nation imposes tariffs and quotas on foreign products, the immediate effect will be to:

- A) reduce the rate of domestic inflation.
- B) increase efficiency in the world economy.
- C) increase domestic output and employment.
- D) reduce domestic output and employment.

Answer: C

13. If the multiplier in an economy is 5, a \$20 billion increase in net exports will:

- A) increase GDP by \$100 billion.
- B) reduce GDP by \$20 billion.
- C) decrease GDP by \$100 billion.
- D) increase GDP by \$20 billion.

Answer: A

Use the following to answer questions 14-17:

Answer the next question(s) on the basis of the following information for a private open economy:

$$C = 40 + .8Y$$

$$\bar{I}_g = I_g = 40$$

$$\bar{X} = X = 20$$

$$\bar{M} = M = 30$$

14. The equilibrium GDP ($=Y$) in the above economy is:

A) \$200. B) \$245. C) \$320. D) \$350.

Answer: D

15. Refer to the above information. In equilibrium, saving is:

A) \$20. B) \$30. C) \$40. D) \$50.

Answer: B

16. Refer to the above information. This nation is incurring:

A) a trade surplus. B) balance in its international trade.
C) a trade deficit. D) unemployment.

Answer: C

17. Refer to the above information. International trade in this case:

A) has an expansionary effect on GDP. C) has no effect on GDP.
B) has a contractionary effect on GDP. D) is causing inflation in this economy.

Answer: B

18. If the equilibrium level of GDP in a private open economy is \$1000 billion and consumption is \$700 billion at that level of GDP, then:

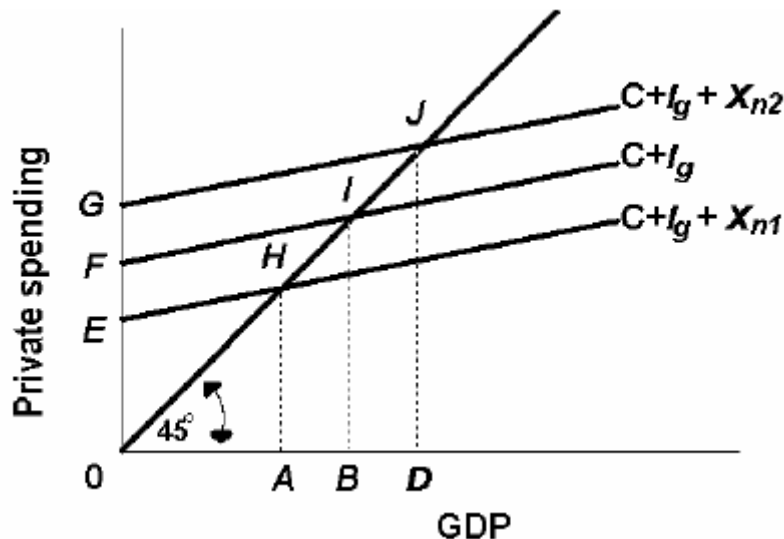
A) saving must be \$300 billion. C) $S + C$ must equal \$300 billion.
B) net exports must be \$300 billion. D) $I_g + X_n$ must equal \$300 billion.

Answer: D

19. An exchange rate:

A) is the ratio of the dollar volume of a nation's exports to the dollar volume of its imports.
B) measures the interest rate ratios of any two nations.
C) is the amount that one nation must export to obtain \$1 worth of imports.
D) is the price at that the currencies of any two nations exchange for one another.

Answer: D



20. Refer to the above diagram. If $(C + I_g)$ are the private expenditures in the closed economy and X_{n2} are the net exports in the open economy:

- A) exports are negative. C) net exports are negative.
 B) net exports are positive. D) exports are positive.

Answer: B

21. Refer to the above diagram. If net exports are X_{n2} , the GDP in the open economy will exceed GDP in the closed economy by:

- A) AB. B) AD. C) FG. D) BD.

Answer: D

22. Refer to the above diagram. The multiplier in this economy is:

- A) $0E/0A$. B) BD/FG . C) FG/BD . D) BD/AD .

Answer: B

23. Refer to the above diagram. If aggregate expenditures in this economy are $(C + I_g + X_{n2})$, then the equilibrium levels of GDP and aggregate expenditures respectively will be:

- A) $0A$ and $0E$. B) $0B$ and $0F$. C) $0A$ and AH . D) $0D$ and DJ .

Answer: D

24. Refer to the above diagram. The change in aggregate expenditures as shown from $(C + I_g + X_{n2})$ to $(C + I_g + X_{n1})$ might be caused by:

- A) an appreciation of this nation's currency relative to the currencies of its trading partners.

- B) a depreciation of this nation's currency relative to the currencies of its trading partners.
- C) a decrease in this nation's price level relative to price levels abroad.
- D) a rightward shift in this nation's 45-degree line.

Answer: A

25. Refer to the above diagram. The change in aggregate expenditures as shown from $(C + I_g + X_{n1})$ to $(C + I_g + X_{n2})$ will produce:

- A) a decrease in real GDP.
- B) an inflationary gap if OD is this nation's full-employment level of GDP.
- C) an increase in real GDP if OB is this nation's full-employment level of GDP.
- D) an inflationary gap if OB is this nation's full-employment level of GDP.

Answer: D

Use the following to answer questions 26-27:

Answer the next question(s) on the basis of the following information for a private open economy. The letters Y , C , I_g , X , and M stand for GDP, consumption, gross investment, exports, and imports respectively. Figures are in billions of dollars.

$$C = 26 + .75Y$$

$$I_g = 60$$

$$X = 24$$

$$M = 10$$

26. The equilibrium GDP for the above open economy is:

- A) \$390.
- B) \$375.
- C) \$320.
- D) \$400.

Answer: D

27. The multiplier for the above economy is:

- A) 4.60.
- B) 3.33
- C) 5.00.
- D) 4.00.

Answer: D

Mixed economy

28. In a mixed open economy the equilibrium GDP exists where:

- A) $C_a + I_g + X_n$ intersects the 45-degree line.
- B) $C_a + I_g = S_a + T + X$.
- C) $C_a + I_g + X_n + G = GDP$.
- D) $C_a + I_g + X_n = S_a + T$.

Answer: C

29. In a mixed open economy the equilibrium GDP is determined at that point where:

- A) $S_a + M + T = I_g + X + G$.
- B) the 45-degree line and the saving schedule intersect.
- C) $S_a + X + G = I_g + T$.
- D) $S_a + I_g + X = G + T$.

Answer: A

30. Suppose that a mixed open economy is producing at its equilibrium income and that net exports are zero. If at the equilibrium income the public sector's budget shows a surplus:

- A) $C_a + I_g + X_n + G$ must exceed GDP. C) a recessionary gap must exist.
- B) planned investment must exceed saving. D) saving must exceed planned investment.

Answer: B

31. Other things equal, if \$100 billion of government purchases (G) is added to private spending ($C + I_g + X_n$), GDP will:

- A) increase by \$100 billion. C) increase by more than \$100 billion.
- B) increase by less than \$100 billion. D) fall by \$100 billion

Answer: C

32. Suppose the economy's multiplier is 2. Other things equal, a \$25 billion decrease in government expenditures on national defense will cause equilibrium GDP to:

- A) decrease by \$50 billion.
- B) decrease by \$150 billion.
- C) decrease by \$25 billion.
- D) remain unchanged since spending on military goods is unproductive and usually wasteful.

Answer: A

33. Assume the MPC is .8. If government were to impose \$50 billion of new taxes on household income, consumption spending would decrease by:

- A) \$100 billion. B) \$90 billion. C) \$40 billion D) \$50 billion.

Answer: C

- B) the equilibrium condition becomes $G + T = S + I_g + X$.
 C) the equilibrium condition becomes $C_a + I_g + X_n + G + T = GDP$.
 D) we add a new leakage in the form of taxes and a new injection in the form of government spending.

Answer: D

39. The level of aggregate expenditures in a mixed open economy is comprised of:

- A) $C_a + I_g + X_n$ B) $C_a + I_g + G + T + X_n$. C) $C_a + I_g + X_n + G$. D) $C_a + G$.

Answer: C

Q2. True or False

1. An increase in exports and taxes lead to an increase in income.

False, an increase in exports (injections) causes an increase in equilibrium national income, while an increase in taxes (leakages) leads to a decrease in equilibrium national income

2. Exports are added to, and imports are subtracted from, aggregate expenditures in moving from a closed to an open economy.

True,

3. If the open economy is in equilibrium, desired national saving will equal desired national asset formation.

True, Because in equilibrium

$$\text{Total leakages} = \text{total injections}$$

$$S + T + M = I + G + M$$

$$S + (T - G) = I + (X - M)$$

$$NS = NAF$$

4. If the rate of domestic inflation exceeds the rate of foreign inflation for the major trading partners, the net export function will rotate downward.

False, because a rise in domestic prices makes exports more expensive and that leads to a decrease in net exports. The net export function will shift downward.

5. The net export function rotates downward as a result of an increase in external value of domestic currency (in the foreign exchange market)

False, because if there is a rise in the value of domestic currency that makes exports more expensive which will cause a decrease in net exports. The net export function will shift downward

Q3. Consider the following model

$$C=100+0.8 Y_d$$

$$G=100, I=120, X=60,$$

$$T= 0.2 Y, IM= 0.15 Y$$

- a) Find the equilibrium national income in two ways
- b) Show it graphically

Solution

a) $AE = C+I+G+(X-M)$ in equilibrium $AE=Y$

$$\begin{aligned} Y &= [100+0.8 (Y-0.2 Y)]+100+120+(60-0.15 Y) \\ &= 380+(Y-0.2 Y) -0.15Y \\ Y &= 380+0.49 Y, \text{ then } Y=745.1 \end{aligned}$$

Or in equilibrium $I+X-IM=S+T-G$

$$\begin{aligned} 120+(60-0.15 Y) &= (-100+0.2 Y_d)+0.2 Y -100 \\ 180-0.15Y &= -200+0.36Y, \text{ then } Y=745.1 \end{aligned}$$

