

This problem set is not graded.

Problem Set 6 Answer key

ECN1B

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1. When a U.S. company sells oil drilling equipment to a Mexican firm and the U.S. firm uses the proceeds to buy stock in a Mexican company, U.S. _____ and there is a capital _____ to/from the United States.

- A) imports increase; outflow
- B) imports decrease; inflow
- C) imports increase; inflow
- D) exports increase; outflow
- E) exports decrease; inflow

Answer: D

2. For an open economy at low values of the domestic real interest rate, the total supply of saving _____ national saving.

- A) equals
- B) is less than
- C) is greater than
- D) equals investment minus
- E) equals investment plus

Answer: B

3. In reference to short-term economic fluctuations, the "peak" refers to:

- A) a period in which the economy is growing at a rate significantly above normal.
- B) the high point of economic activity prior to a downturn.
- C) the low point of economic activity prior to a recovery.
- D) a particularly strong and protracted expansion.
- E) a particularly severe and protracted recession.

Answer: B

4. The following data give the dates of successive turning points in U.S. economic activity and the corresponding levels of real GDP at the time:

Turning Point	Date	Real GDP (1996 \$ billions)
(A)	July 1953	1992.2
(B)	May 1954	1941.0
(C)	Apr. 1957	2182.7
(D)	Apr. 1958	2117.4
(E)	Apr. 1960	2391.0

Which of the turning points are troughs?

Answer: (B) and (D)

5. Typically unemployment _____ during a recession and _____ during an expansion.

- A) rises; rises even more
- B) rises; falls
- C) rises; does not change
- D) falls; rises
- E) falls; falls even more

Answer: B

6. If the natural rate of unemployment equals 6% and the actual rate of unemployment equals 5%, then what is cyclical unemployment?

Answer: -1%

7. In Macroland potential output equals \$100 trillion and the natural rate of unemployment is 4 percent. Suppose the actual unemployment rate is 5 percent, What is the output gap?

Answer: \$ 2 trillion $(100 - Y)/100 = 2 \text{ times } (0.05 - 0.04) \Rightarrow Y = 98$, $\text{gap} = 100 - 98 = \$ 2 \text{ trillion}$

8. Suppose U.S. exporter sells software to Israel. She uses the Israeli shekels received to buy a sock in an Israeli company. How does this transaction affect (1) trade surplus or deficit and (2) capital inflows or outflows for U.S.? Show that the identity that the trade balance plus net capital inflows equals zero applies.

Answer: The U.S. export creates a trade surplus ($NX > 0$). The purchase of Israeli stock is a capital outflow in the same amount ($KI < 0$). The capital outflow (negative inflow) just offsets the trade surplus.

9. A country's domestic supply of saving, domestic demand for saving for purposes of capital formation, and supply of net capital inflows are given as follows;

$$S = 1500 + 2000r$$

$$I = 2000 - 4000r$$

$$KI = -100 + 6000r$$

Assuming that the market for saving and investment is in equilibrium, find national saving, net capital inflows, domestic investment, and the real interest rate.

Answer: Equilibrium in the market for savings and investment requires

$$S + KI = I$$

$$(1,500 + 2,000r) + (-100 + 6,000r) = 2,000 - 4,000r$$

$$12,000r = 600$$

$$r = 0.05 = 5\%$$

Given that the real interest rate is 5%, we can find that domestic saving is $1,500 + 2,000(0.05) = 1,600$, capital inflows are $-100 + 6,000(0.05) = 200$, and investment is $2,000 - 4,000(0.05) = 1,800$.