

Answer Key

PART A (30 pts.)

Question	Answer	Question	Answer	Question	Answer
1	B	11	A	21	D
2	C	12	C	22	A
3	D	13	B	23	B
4	C	14	D	24	D
5	D	15	B	25	E
6	B	16	A	26	A
7	D	17	E	27	C
8	A	18	B	28	D
9	B	19	C	29	A
10	A	20	C	30	D

PART B (Short answers, 30 pts.)

1. (4 pts)

a) What is the labor force? **4**

The labor force includes people that are either employed or unemployed but actively looking for a job. Ron, Ran, Bob and Tim are part of the labor force. Lea is excluded because she stays at home. Jim is working in the underground economy and is thus officially not looking for a job.

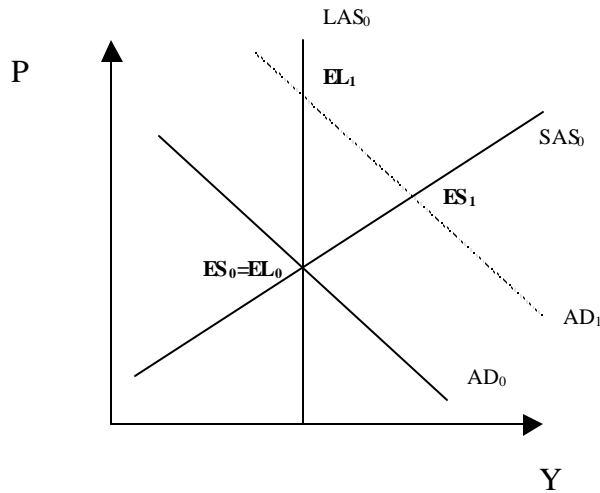
b) What is the unemployment rate? **1/4**

Among Ron, Ran, Bob and Tim, only Tim does not have a job.

2. (8 pts.)

The victories affect ONLY the AD curve in the short run, through an increase in consumption for any given price level (recall that $AD=C+I+G+X-M$). The LAS and SAS curves do not shift in the short run. They depend, among other things, on technology, nominal wages or physical and human capital per worker. None of these elements are affected by the outcome of a baseball game.

Graphically, the AD curve shifts to the right. A greater aggregate demand will induce both equilibrium price level and quantity to increase. In the long run, wages will increase, shifting the SAS upward such that the equilibrium quantity is back to potential GDP.



3. (8 pts)

- $GDP = C + I + G + X - M = 183$
- net exports = $X - M = 3$
- aggregate expenditure = $Y = 183$
- aggregate income = $Y = 183$
- household savings = $S = Y - C - T = 33$
- government saving = $T - G = -6$
- national saving = household savings + government saving = $S + (T - G) = 27$
- borrowing from the rest of the world = $M - X = -3$

4. (10 pts)

- Using 2000 as the base year, compute the real GDP for 2000 and 2001.

$$GDP_{00} = 6 \cdot 66 + 7 \cdot 56 = 788$$

$$GDP_{01} = 6 \cdot 90 + 7 \cdot 50 = 890$$

- Using your answers in *b*), compute the growth rate of real GDP over the years 2000 and 2001 using the log method seen in class.

$$g_1 = 100 \cdot [\text{LN} (890 / 788) / (2001 - 2000)] = 12.17$$

- Using 2001 as the base year, compute the real GDP for 2000 and 2001.

$$GDP_{00} = 3 \cdot 66 + 12 \cdot 56 = 870$$

$$GDP_{01} = 3 \cdot 90 + 12 \cdot 50 = 870$$

- Using your answers in *d*), compute the growth rate of real GDP over the years 2000 and 2001 using the log method seen in class.

$$g_1 = 100 \cdot [\text{LN} (870 / 870) / (2001 - 2000)] = 0$$

- Economists using the chain-weighted index would report what growth rate of real GDP over the period considered? (Note: if you think that more than one method applies, use your favorite one)

$$\text{Average: } (g_1 + g_2) / 2 = (12.17 + 0) / 2 = 6.09$$

$$\text{Geometric average: square root of } g_1 \cdot g_2 = \text{sqrt} (12.17 \cdot 0) = 0$$