

Homework 8 – KEY

Average: 89.76 + Opts GI bonus

Due on 24/3/2026, by 23:00

The tasks in this assignment were designed for the average student to solve independently after mastering the material. The answers provided here are written in an instructional manner to help you understand the problem-solving process for each task. If you continue to struggle with a task after reviewing this key, the difficulty may stem not from the task itself, but from having missed or overlooked some parts of the required material.

- 1✓ Which of the following factors affect(s) the growth rate of an economy?
 - A. Investor's confidence. *[It is the most important factor in investment decision making]*
 - B. Consumer's confidence. *[Consumption is a large part of GDP; hence low consumer's confidence limits the extent to which the economy can grow]*
 - 93%C. Both A and B.
 - D. None of the above.

- 2✓ Which of the following best describes the *catch-up* effect?
 - A. A developed economy approaching the growth rate of a developing economy.
 - B. A developed economy approaching the growth rate of another richer developed economy.
 - 97%C. A developing economy approaching the GDP per capita of a developed economy.
 - D. A developed economy approaching the GDP per capita of a developing economy. *[Catch-up effect occurs when developing economies tend to grow at faster rates than the richer ones, allowing them to catch up in terms of per capita income]*

- 3Ⓞ Which of the following is likely to decrease a country's aggregate saving?
 - A. An increase in the interest rate. *[High interest rates incentivize saving]*
 - 19%B. The expectation that income tax will increase in the future. *[When people expect their future income to decrease, they may tend to save more today]*
 - C. A fear that a recession may occur soon. *[Same logic with B]*
 - 79%D. None of the above.

- 4✓ Which of the following could decrease the effect of *diminishing marginal product* on capital?
 - 97%A. Technological improvement. *[Better technology allows each unit of capital to be used more efficiently, so the marginal product of capital falls more slowly or may even rise for a time]*
 - B. Economies of scale. *[Economies of scale presume that production becomes more efficient in higher volumes because more suitable production factors will be brought into production from other firms, industries or from unemployment. This is a microeconomic level of thinking. In macro, we assume that the most productive factors in the economy will be used first]*
 - C. Depreciation. *[Depreciation only affects how fast capital wears out, it does not change how productive each additional unit of capital is]*
 - D. Excess saving. *[Irrelevant]*

- 5✓ In the Solow model, which of the following curves will shift if workers become more productive?
 - 92%A. sY .
 - B. dK .
 - C. sY and dK .
 - D. None of the above. *[Labor productivity will affect Y , thus sY . It does not affect dK]*

6. According to the Solow model, which of the following is most likely to increase a country's steady-state output?
- 19%A. An increase in K . *[Changes in K do not shift the dk or sY curves, but trigger a movement along them]*
 - 68%B. **An increase in L .** *[This would increase Y and, correspondingly, sY , thus steady state GDP would also increase]*
 - C. An increase in d . *[This would make dK to rotate counter-clockwise, leading to a lower steady-state output]*
 - D. It is not possible for an economy to increase its steady-state output.
7. An economy is currently at Solow's steady-state, yet it keeps growing by 2.5% per year. Which of the following applies?
- 98%A. **The economy exhibits sustained growth.** *[Sustained growth is due to technological innovation or human capital development, thus it can still happen at the steady-state]*
 - B. The economy exhibits catch-up growth. *[An economy should be way below its steady-state to exhibit catch-up growth]*
 - C. The economy exhibits unemployment. *[Irrelevant]*
 - D. The economy exhibits the lipstick effect. *[Irrelevant]*
8. Which of the following is most likely to decrease d ?
- 74%A. **An innovation that makes steel corrosion resistant.** *[Decreases the rate at which capital decays]*
 - B. An innovation that boosts the octane level in petrol. *[Perhaps improves Y , does not affect d]*
 - C. The invention of a more efficient type of battery. *[Perhaps improves Y , does not affect d]*
 - 26%D. All of the above.
9. Two economies are described by identical Y , sY , dK curves, which yield a steady-state output of 80. Economy A's output is currently 62 and Economy B's is 75. Which of the following is true?
- 97%A. **Next year, Economy A will grow faster than Economy B.**
 - B. Next year, Economy B will grow faster than Economy A.
 - C. Next year, Economy A and B will grow at the same pace.
 - D. Next year, Economy A and B will not grow at all.
[Economy B is closer to its steady-state, so it will grow slower]
10. Which of the following may increase a country's potential to exhibit catch-up growth?
- A. Stricter environmental regulations. *[Unfortunately, it will discourage foreign investors]*
 - B. A tax on foreign investment. *[It would also discourage foreign investors]*
 - 97%C. **Underutilization of the workforce.** *[It would encourage foreign companies to open factories in these countries, thus taking advantage of cheap labor]*
 - D. All of the above.