

ECON 100 - Homework 7

Fall 2026

- Define any variables and/or state any assumptions you need to answer the problems.
 - Feel free to use any materials, including classmates, on this homework!
 - Please write your answers in the space provided.
 - Keep your answers for explanations short but clear. Your goal is to convince a skeptical grader that you understand the relevant concepts well enough to answer the question you are given. Cite specific concepts from class for full credit.
 - The questions on the homework sum to 54 points.
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1. (1 point) What is your name?
2. (1 point) What section are you in? (Either section number or what time your class meets)

1 True/False Questions

Indicate “T” rue or “F” alse for each of the following statements or claims. If you correctly explain why a statement or claim is false, I will give you a bonus point up to a 100% on this homework.

3. (2 points) The Holiday shopping period has ended, and Amazon lays-off (fires) 25,000 seasonal workers. **Claim:** Structural unemployment has increased as a result of these layoffs.
4. (2 points) **Claim:** When inflation is positive, the real interest rate is always lower than the nominal interest rate.
5. (2 points) **Claim:** The study of long-run economic growth focuses on understanding the business cycle, while the study of short-run growth focuses on the general trend of output over time.
6. (2 points) Suppose Bill tutors his neighbor’s son Billy in economics for \$20 per hour for two hours a week in 2025. Bill receives cash for his services, and does not report this income in his taxes. **Claim:** This income is still included in officially measured GDP in 2025 even though it is unreported.
7. (2 points) Liquidity refers to how easily an asset may be turned into cash.

2 Multiple Choice Questions

Choose the best answer for each question. There is **ONLY** one correct answer for each question. No explanation necessary.

8. (2 points) Which of the following below is **not** a function of money?
- A. Medium of exchange.
 - B. Store of value.
 - C. Unit of account.
 - D. Promise of future payment.
9. (2 points) Suzie decides to measure the Clinton economy in the short-run based on the number of people who enter Utica Coffee between 9am and 12pm on weekdays. When the economy is neither in a recession nor a boom, she observes on average 100 people entering Utica Coffee between these times during weekdays. The next week, she observes 150 people entering Utica Coffee on weekdays between 9am and 12pm. Which of the following should she conclude?
- A. Clinton is in a recession.
 - B. Clinton is in a boom.
 - C. Clinton is experiencing long-run growth.
 - D. Clinton is experiencing stagflation.
10. (2 points) Which of the following would affect the calculated labor force participation rate?
- A. The Justice Project finds Alice innocent of a crime, and she immediately begins looking for work upon her release from prison.
 - B. Bill loses his job and immediately sends out applications on Linked-in.
 - C. Alanna aces her final-round interview and lands a job at ABC Consultants.
 - D. Olivia is already retired and decides not to look for a job when her daughter asks if she wants to.
11. (2 points) Suppose Venmo begins tracking transactions and reporting these transactions to the US Internal Revenue Service. This means babysitters and other freelancers who used to be paid under-the-table are now essentially paid a wage observed by the government. **Question:** If this policy does not impact the quantity of freelance services paid through Venmo, which of the following represents the most likely impact of this policy on GDP?
- A. GDP goes down because tax revenue increases.
 - B. GDP goes down because these transactions are now officially recorded.
 - C. GDP goes up because tax revenue increases.
 - D. GDP goes up because these transactions are now officially recorded.
12. (2 points) From my bank's perspective, what is the impact of a paycheck being added to my savings account?
- A. Savings increase.
 - B. Deposits increase.
 - C. Liabilities decrease.
 - D. Assets decrease.

3 Short Answer Questions

These questions all require math, diagrams, and/or written explanations. Remember you are trying to convince me you understand the why and how of what you are doing, not simply that you are able to get the numerical/graphical answer correct. Include specific concepts from class in your written explanations for full credit.

13. (8 points) Suppose the following data for Econoland, which produces only milk and honey.

Year	Price of Milk	Quantity of Milk (quarts)	Price of Honey	Quantity of Honey (quarts)
2016	\$1	100	\$2	50
2017	\$1	200	\$2	100
2018	\$2	200	\$4	100

Compute nominal GDP in each year, and calculate the sum of nominal GDP over all 3 years.

14. For each event in the economy, explain (i) whether unemployment is affected, (ii) if so, which type of unemployment is affected, and (iii) in which direction (increase or decrease).
- (a) (6 points) Companies increase their usage of robots and automation in producing goods.
 - (b) (6 points) The stock market soars, leading to booming economic times.
 - (c) (6 points) New college graduates become more picky about finding a “perfect job match.”
 - (d) (6 points) An increased usage of job search sites like LinkedIn facilitates the job search process.

4 Ungraded Questions

Extra practice problems. Solutions may or may not be posted. See me in office hours to go over answers if desired!

1. A farmer grows wheat, which he sells to a miller for \$100. The miller turns the wheat into flour, which he sells to a baker for \$150. The baker turns the flour into bread, which he sells to consumers for \$180. Consumers eat the bread.
 - (a) (0 points) What is GDP in this economy? Briefly explain.
 - (b) (0 points) Calculate the value-added of each of the three producers. Assume the farmer buys no intermediate goods to produce the wheat.
 - (c) (0 points) Does the sum of these values added equal GDP? Why or why not?
2. Explain what happens to both the unemployment rate (increase/decrease) and the labor force participation rate (increase/decrease) under the following scenarios. Your explanations should clearly state which type of unemployment is affected, if any.
 - (a) An auto company goes bankrupt and lays off its workers, who immediately start looking for new jobs.
 - (b) After an unsuccessful search, some of the laid-off workers quit looking for new jobs.
 - (c) Numerous students graduate from college and look for jobs but cannot find any.
 - (d) Numerous students graduate from college and immediately begin new jobs.
 - (e) A stock market boom induces newly enriched 60-year-old workers to take early retirement.
 - (f) Advances in healthcare prolong the life of many retirees.