

Homework 1, ECON 2300, Darren Grant. Please turn in the problems below on the assigned class day. Those will be reviewed in class and graded. For what you turn in, use your own paper (not this sheet), staple multiple pages together, and remove any “nurdles” that you get when you tear paper out of a spiral notebook. Please note: I will not accept homeworks that are late, even if you are just late to class, or unstapled homework, or homework with “nurdles.” You can always turn it in *early* by sliding it under my office door.

In addition to these problems, end-of-chapter problems from the textbook can be used for practice, along with some ungraded, optional quizzes that I have placed on Blackboard.

1. Which one of the following markets is closest to perfect competition? Which one is furthest from it? Why?

- A) Peanut Butter
- B) Hotels
- C) Hospitals
- D) Landscaping

2. There are 5,000 parking spaces on SHSU’s campus. During the day, the lots are full but not overflowing. Day parking privileges are granted by buying a sticker, which costs \$200 per semester.

A) On a single graph, draw a demand curve for parking, and identify the number of parking spots on campus and the \$200 price. Make sure your graph is consistent with the fact that the lots are full (but not overflowing) during the day.

B) If the price of parking stickers went down to say, \$100 per semester instead of \$200, what would it be likely out in the parking lots during the day; that is, what would be the consequences? Explain in words, and illustrate on the graph you have drawn.

3. (Mankiw, modified) Illustrate how each of the following events affect price and quantity in the market for minivans, using supply/demand graphs.

- A) There is a baby boom.
- B) Steel prices increase.
- C) The price of SUVs falls.
- D) Stock-market gains increase people's wealth.

4. Two of the following markets are not perfectly competitive. Which two, and why?

- A) Wheat
- B) Paper
- C) Art (like paintings, sculpture)
- D) Unskilled Workers to work in Fast Food Restaurants
- E) Loans (money to be lent)
- F) Cellular Service

5. Government does several things to facilitate the smooth operation of the free market. Describe two of them. In general, do economists believe it is best to let a free, competitive market make its own pricing and output decisions, or do they advocate government intervention instead? Explain.

6. The book discusses the effect of rent controls on price and quantity in the rental housing market. Based on that, and class discussion, answer the following questions.

A) Illustrate the effect of rent controls on price and quantity, using a supply/demand graph.

B) These rent controls have side effects involving the black market and the quality of rental housing. Describe each.

C) Is this market at equilibrium? If not, is there a shortage or a surplus of rental housing? Explain.

7. Illustrate, for each situation, the effect of the “event” on price and quantity, using a supply/demand graph.

- A) An decrease in income, on the market for gold.
- B) A cost-saving technology improvement, on the market for computers.
- C) A flood (of water), on the market for wheat.
- D) Summer (vacation time), on the market for gasoline.
- E) An increase in the price of electricity, on the market for steel.

8. The deregulation of the trucking industry around 1980 dramatically lowered the transportation costs of many goods producers, particularly manufacturers; it was cheaper to transport in the raw materials, and it was cheaper to transport out the final product. How did this affect the price and quantity of manufactured goods in the competitive market? Illustrate on a supply/demand graph.

9. (Case and Fair, modified) The U.S. government administers two programs that affect the market for cigarettes. Media campaigns and labeling requirements are aimed at making the public aware of the health dangers of cigarettes. At the same time, the Department of Agriculture maintains a program which limits the amount of land that can be devoted to growing tobacco. On two separate supply/demand graphs, illustrate the effect of each program. Are they at odds with respect to the goal of reducing cigarette consumption, or do they work together to achieve this goal?

10. For each situation, illustrate the effect of the “event” on price and quantity in the stated market, using a supply/demand graph.

- A) A machine is developed that harvests tomatoes mechanically, on the market for tomatoes.
- B) An economic expansion leads to a boom in housing construction, on the housing market.
- C) Oil is discovered in Alaska, on the oil market.
- D) An increase in the price of mustard, on the market for grocery-store hot dogs.

11. Use the following information to answer these questions. Columns One and Two contain quantities (in arbitrary units).

Price	Column One	Column Two
\$9	11	15
\$8	12	14
\$7	13	13
\$6	14	12
\$5	15	11
\$4	16	10

A) Which column gives the demand relationship, and which gives the supply relationship? Explain.

B) What is the equilibrium price? Explain.

C) A price _____ (floor, ceiling) set at a price of \$_____ will lead to a surplus of 2 units.

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In addition to these problems, end-of-chapter problems from the textbook can be used for practice, along with an ungraded, optional quiz that I have placed on Blackboard.

1. (Mankiw, revised) Sheridan and Tammany are roommates. Sheridan takes 2 hours to brew a gallon of root beer and 4 hours to make a pizza. Tammany takes 4 hours to brew a gallon of root beer and 6 hours to make a pizza.

- A) What is opportunity cost of pizza, in terms of root beer, for each person? Who will specialize in pizza production?
- B) Which person has absolute advantage in pizza? Who has comparative advantage in pizza?
- C) If Sheridan and Tammany each work a 12 hour day, what do their PPF’s look like?

2. The three largest countries in North America are the United States, Canada, and Mexico. Listed below are the amounts (in bushels) of Wheat Germ and Oat Bran each country can produce on one acre of land, if they devote it to the production of that commodity.

	Wheat Germ	Oat Bran
United States	50	150
Canada	60	240
Mexico	70	350

- A) Draw the PPF’s for each country (three PPF’s).
- B) Plot the point (50,150) on the United States’ graph. Is this point on the PPF or not?
- C) During the talks for NAFTA, the trade agreement, the three countries agree that one of them should specialize in Wheat Germ production. Which country should it be? Show your work.
- D) Which has a higher price, a bushel of Wheat Germ or a bushel of Oat Bran? Why?
- E) Countries do best when they specialize in producing those product(s):
 - 1) which they can produce more of than other countries can.
 - 2) which they cannot produce as much of as other countries can.
 - 3) which they can produce at a lower opportunity cost than other countries can.
 - 4) which they can produce at a higher opportunity cost than other countries can.

3. The “Minnow” has been shipwrecked on an uncharted desert island. The table below tells you how many fish or coconuts each castaway could catch/find in a hour of work.

	Fish Caught in one hour of work	Coconuts Found in one hour of work	Opp. Cost of 1 Fish
Gilligan	5	18	
Ginger	8	24	
Mary Ann	3	12	
The Professor	6	15	
The Skipper	7	14	

A) In order to produce coconuts and fish most efficiently, should each castaway make some fish and some coconuts, or should people specialize in fish or coconuts?

B) Determine the opportunity cost of catching one fish, for each person, and fill them in the table. Is it better for the person with the lowest opportunity cost to make fish or coconuts?

C) Who has comparative advantage in the production of fish? Who has absolute advantage?

4. What effect would the following have on the value of the dollar? Illustrate on four separate supply/demand graphs.

A) Consumer optimism leads people in the U.S. to want to buy more imported leather goods.

B) The interest rate falls in the United States.

C) Governmental instability in Russia causes Russians to wish to take their invested money out of that country and invest it in the U.S. instead.

D) A decrease in trade barriers encourages American exports.

5. Before NAFTA, it was hard to sell Mexican avocados in the U.S. After NAFTA, it was easy.

A) Using two supply/demand graphs, illustrate the effect of the NAFTA free trade agreement on the price and quantity of avocados from the U.S., and from Mexico.

B) Who, of the following, benefits from free trade in avocados? 1) U.S. avocado producers, 2) U.S. avocado consumers, 3) U.S. avocado workers, 4) Mexican avocado producers, 5) Mexican avocado consumers, 6) Mexican avocado workers.

C) As NAFTA removes trade barriers, which of the following happens? Identify all that apply: 1) the U.S. as a whole benefits, 2) Mexico, as a whole benefits, 3) more total stuff is produced, 4) some U.S. avocado growers go out of business, 5) everyone in the U.S. benefits.

6. Currently imports of sugar from the Caribbean are restricted by the U.S. government. Much of the sugar produced within the U.S. is grown in Florida and Louisiana and processed there and elsewhere. Absent these import restrictions, there would be much more trade between the U.S. and the Caribbean in sugar.

A) Based on this information, which place has comparative advantage in sugar production: the U.S. or the Caribbean? Which place's sugar supply curve is further to the right?

B) Using a supply/demand graph, illustrate the effect of imposing these trade barriers on the price and quantity of sugar from the Caribbean.

C) Using a supply/demand graph, illustrate the effect of imposing these trade barriers on the price and quantity of sugar from the U.S.

D) Who, of the following, benefits from the trade restrictions in sugar? Identify all that apply: 1) U.S. sugar producers, 2) U.S. sugar consumers, 3) U.S. sugar workers, 4) Caribbean sugar producers, 5) Caribbean sugar consumers, 6) Caribbean sugar workers.

E) Which of the following statements are true? Identify all that apply:

- 1) If the trade restrictions were removed, the U.S. would benefit, as a whole.
- 2) If the trade restrictions were removed, the Caribbean would benefit, as a whole.
- 3) If the trade restrictions were removed, more total stuff would be produced.
- 4) Removing the trade restrictions could put some U.S. sugar growers out of business.
- 5) The trade restrictions on sugar benefit everyone in the United States.

7. Saudi Arabia exports a lot of oil, and its currency is the riyal.

A) What was the likely effect of Covid lockdowns on the riyal/dollar exchange rate? Support your answer with a supply/demand graph.

B) Did the lockdowns shift Saudi Arabia's trade balance toward a surplus or a deficit? Why?

8. Since Covid, the American dollar has gotten weaker against the yen.

A) Based on this fact, which (if any) of the following are true? Identify any and all that apply:

- 1) imports from Japan, into the United States, have become cheaper
- 2) the yen/dollar exchange rate went up
- 3) Americans travelling in Japan are able to buy more
- 4) the yen has depreciated

- B) (Mankiw) Which groups are happy that the U.S. dollar has gotten weaker against the yen?
- a) Japanese pension funds holding U.S. government bonds
 - b) U.S. manufacturing industries looking to export their products
 - c) Japanese tourists planning a trip to the U.S.
 - d) American retirees purchasing a retirement property in Japan

9. The U.S. currently has negative net exports.

A) How do our imports compare to our exports? Do we have a trade surplus or a trade deficit?

B) Is our “current account” positive or negative? According to the balance of payments, is our “capital account” positive or negative?

C) Do other countries invest more in the U.S. than we do in other countries? Choose one answer and explain.

- 1) they invest in us more than we invest in them
- 2) we invest in them more than they invest in us
- 3) the amount of investment is equal, because of equilibrium

10. (Mankiw) How would each of the following transactions affect U.S. trade? Answer with “It (increases/decreases) (exports/imports)” followed by a brief explanation.

- 1) An American economics professor spends the summer with his wife in Montreal.
- 2) Students in Paris flock to see the latest Hollywood blockbuster.
- 3) Your American uncle buys a new Volvo, produced in Sweden.
- 4) Honda begins producing its cars in the U.S. instead of sending them over from Japan.

Homework 3, ECON 2300, Darren Grant. Please write out the answers on your own sheets of paper (not the original assignment sheet), staple multiple pages together, and remove any “nurdles” you get from tearing paper out of a spiral notebook. Your work must be turned in on time, that is, at the beginning of the class period that it is due. I don’t accept work via e-mail, but you can turn in your homework in advance by sliding it under my office door.

1. The following table contains economic statistics for a “mystery country.” 2023 is the base year.

Year	Nominal GDP	Price Index	Real GDP
2023	\$15		
2024		120	\$16
2025	\$18		\$17

A) Fill in the empty cells of the table. ** Show your work for all calculations! **

B) If the table represented (approximately) the U.S. economy, then these figures would be in {hundreds, thousands, millions, billions, etc.}?

2. The Federal Reserve conducts open market operations, purchasing \$50 million of Treasury bonds.

A) What happened to the money supply: did it increase, decrease, or stay the same? Why?

B) What effect would this have on interest rates? Would it increase them, decrease them, or keep them the same? Why?

C) Does this amount to fiscal policy or monetary policy?

D) Do you expect these open market operations to increase output or decrease it? What about prices?

E) Is \$50 million of Treasury bonds a lot?

1) not really, total money supply is in the trillions

2) yes it is, \$50 million would add a material amount to the money supply

3. The country of Ponderosa is mired in recession. Its AS curve has the shape suggested by John Keynes.

A) Draw an AS/AD graph for this country.

Now the government undertakes expansionary monetary policy.

B) How does the government undertake expansionary monetary policy? That is, what does it do?

C) Draw the effects of the policy on the graph. Identify output and the new price level on the graph.

D) Does inflation increase much in Ponderosa? Does unemployment decrease much in Ponderosa?

E) On balance, is this expansionary policy desirable in this instance, or not? Explain.

4. In the crazy country of Grantonia, between 2021 and 2022, the CPI increased from 100 to 110, while real GDP increased from \$500 Million to \$505 Million.

A) What is nominal GDP in 2021?

B) What is nominal GDP in 2022? Show your work.

C) What was inflation between 2021 and 2022? Show your work.

5. There are (at least) three different types of unemployment: frictional, structural, and cyclical.

A) Briefly describe each.

B) Which kind of unemployment are each of the following policies most clearly directed at? Why?

- 1) Job-training assistance for workers displaced by NAFTA, the free trade agreement.
- 2) The Dept. of Labor posts job listings and has a computer database where people can look up jobs they are qualified for.
- 3) Expansionary monetary policy is used to help pull the economy out of a recession.

C) Based on the textbook, name one weakness of the way economists measure unemployment.

6. During the Covid pandemic, the U.S. government ran large deficits to assist the economy.

A) Are government deficits run by the Federal Reserve, or by some other government entity? Explain.

B) Are deficits a form of monetary policy, fiscal policy, or neither?

C) One thing the government did during this time was send out “stimulus payments” to households, which amounted to thousands of dollars per household. Did this add to the government deficit? Which component of GDP would increase the most as a result of these payments?

D) Another thing the government did during this time was purchase various things from the private sector. Did this add to the deficit? Which component of GDP would increase the most as a result of these purchases?

7. The country of Bristlecone is currently in an expansion which has lasted for some time. Its AS curve has the shape suggested by John M. Keynes.

A) Draw an AS/AD graph for this country.

Now the government undertakes expansionary fiscal policy.

B) What does it mean to undertake expansionary fiscal policy? That is, what does the government do?

C) Draw the effects of the policy on the graph. Identify the new price level and output level on the graph.

D) Does inflation increase much in Bristlecone? Does unemployment decrease much in Bristlecone?

E) On balance, is this expansionary policy desirable in this instance, or not? Explain.

8. In Marsupialland, the unemployment rate is currently 10%.

A) If the number of unemployed people was 1,000, then how many people are in the labor force? Show your work.

B) Is unemployment near the natural rate of unemployment? Why or why not?

C) Is there any cyclical unemployment in Marsupialland? Why or why not?

D) Is the country's output near potential GDP, or below it, or above it? Explain.

E) Illustrate this situation on an AS/AD graph. Be sure to illustrate or label potential GDP on your graph.

9. In the 1950's, it became practical for tourists to fly to islands in the South Pacific on vacation. Many of these islands are their own countries, such as Fiji or Tonga.

A) How would this development affect the macroeconomies of these island countries? Illustrate on an AS/AD graph, and indicate whether output, inflation, and unemployment will increase or decrease.

B) Of the four components of GDP, which two do you think would increase the most as a result of this increased tourism? Why?

10. On my web site, at <https://profiles.shsu.edu/dpg006/earnings.html>, I have placed graphs of the annual earnings of all graduates of SHSU's College of Business who are working in Texas. Review these graphs and then answer the following questions.

A) For the most part, these earnings tend to be relatively flat over time, but there are exceptions to this rule, most particularly around 2009 and 2010. What do you think happened to the unemployment rate during that time? Would this be consistent with an expansion or a recession? Explain.

B) The graphs say that they present "real earnings." What does "real" mean in this phrase?

C) If the graphs presented nominal earnings instead of real earnings, would they rise over time, fall over time, or remain largely flat? Explain.