

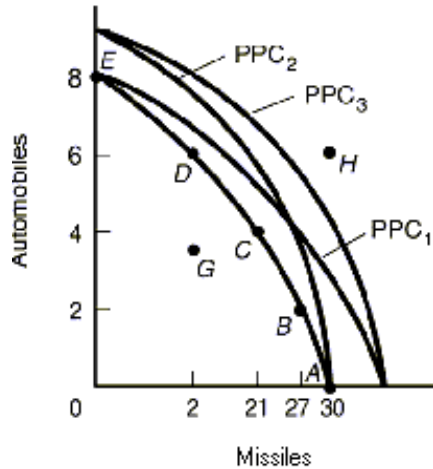
MACROECON 2105: ANSWER-KEY-----Chapter 1: 5, 10, 12, and 13.

5. Macroeconomics: (a), (d), and (f)

Microeconomics: (b), (c), and (e)

10.

- (a) See curve EDCBA. The assumptions are full employment, fixed supplies of resources, fixed technology and two goods.



- (b) The opportunity cost of one more automobile is 5 forklifts. The opportunity cost of one more forklift is $2/6 = 1/3$ or .33 automobiles, as determined from the table. Increasing opportunity costs are reflected in the concave-from-the-origin shape of the curve. This means the economy must give up larger and larger amounts of forklifts to get constant added amounts of automobiles—and vice versa.
- (c) The economy is underutilizing its available resources. The assumption of full employment has been violated.
- (d) Production outside the curve cannot occur (consumption outside the curve could occur through foreign trade). To produce beyond the current production possibilities curve this economy must realize an increase in its available resources and/or technology.

12. (a) Assuming better education translates into better work skills, then productivity should rise and this would shift the curve outward.

(b) Should not affect location of curve. Production moves inward, away from the curve.

(c) The curve should shift outward as more production is possible with existing resources.

(d) The curve should shift inward with the destruction of resources (capital).

13. See the graph for question 1-10. PPC₁ shows improved forklift technology. PPC₂ shows improved auto technology. PPC₃ shows improved technology in producing both products.

Chapter 2: 1

2-1 Contrast how a market system and a command economy try to cope with economic scarcity.

A market system allows for the private ownership of resources and coordinates economic activity through market prices. Participants act in their own self-interest and seek to maximize satisfaction or profit through their own decisions regarding consumption or production. Goods and services are produced and resources are supplied by whoever is willing to do so. The result is competition and widely dispersed economic power.

The command economy is characterized by public ownership of nearly all property resources and economic decisions are made through central planning. The planning board, appointed by the government determines production goals for each enterprise. The division of output between capital and consumer goods is centrally decided based on the board's long-term priorities

Chapter 3: 2, 3, 6, AND 8

2. The fundamental determinant of demand is the price of the commodity under consideration: a change in price causes movement along the commodity's demand curve. This movement is called a change in quantity demanded. Decreased price leads to movement down the demand curve: There is an increase in quantity demanded. Increased price leads to movement up the demand curve: There is a decrease in quantity demanded.

In addition, there are determinants of demand, which are factors that may shift the demand curve, i.e., cause a "change in demand." These are the number of buyers, the tastes (or desire) of the buyers for the commodity, the income of the buyers, the changes in price of related commodities (substitutes and complements), and expectations of the buyers regarding the future price of the commodity under discussion.

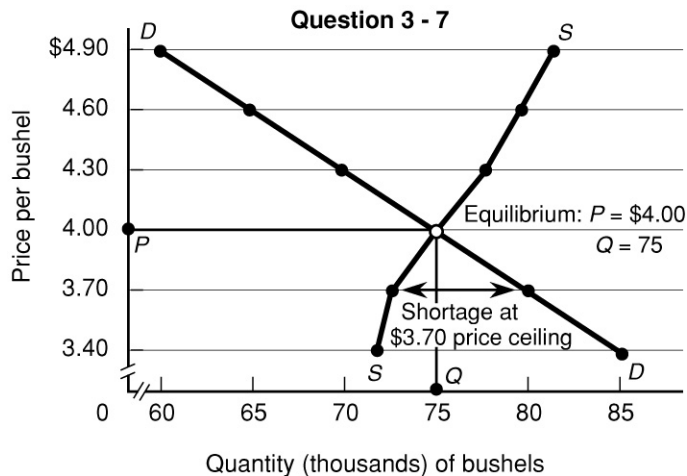
The following will lead to increased demand: more buyers, greater desire for the commodity, higher incomes (assuming a normal good), lower incomes (assuming an inferior good), an increased price of substitutes, a decreased price of complements, and an expectation of higher future prices or incomes. This increased demand will show as a shift of the entire demand curve to the right.

The reverse of all the above will lead to decreased demand and will show as a shift of the entire demand curve to the left.

3. Demand increases in (a), (b), and (c); decreases in (d). The last one (e) is ambiguous. As autos and gas are complements, one could argue that the decrease in gas prices would stimulate demand for all cars, including small ones. However, one could also argue that small cars are attractive to consumers because of fuel efficiency, and that a decrease in gas prices effectively reduces the price of the "gas guzzling" substitutes. That would encourage consumers to switch from smaller to larger cars (SUVs), and demand for small automobiles would fall. [This presents a good illustration of the complexity of many of these changes.]

6. Supply increases in (a), (d), (e), and (g); decreases in (b), (c), and (f).

8. Data from top to bottom: -13; -7; 0; +7; +14; and +21.



- (a) $P_e = \$4.00$; $Q_e = 75,000$. Equilibrium occurs where there is neither a shortage nor surplus of wheat. At the immediately lower price of \$3.70, there is a shortage of 7,000 bushels. At the immediately higher price of \$4.30, there is a surplus of 7,000 bushels. (See graph above).
- (b) See graph above.
- (c) Because at \$3.40 there will be a 13,000 bushel shortage which will drive price up. Because at \$4.90 there will be a 21,000 bushel surplus which will drive the price down. Quotation is incorrect; just the opposite is true.

APPENDIX CHAPTER 3: 1 AND 3

- The increase in supply will lower the equilibrium price and increase the equilibrium quantity of apples. Quantity demanded increases without a shift in the demand curve because the greater supply causes price to fall.
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- The supply and demand curves would shift left by an equal amount, reducing the equilibrium quantity and leaving the equilibrium price unchanged.

CHAPTER 7: 3,7 AND 13.

- The dollar value of final goods includes the dollar value of intermediate goods. If intermediate goods were counted, then multiple counting would occur. The value of steel (intermediate good) used in autos is included in the price of the auto (the final product).
This value is not included in GDP because such sales and purchases simply transfer the ownership of existing assets; such sales and purchases are not themselves (economic) investment and thus should not be counted as production of final goods and services.
Used furniture was produced in some previous year; it was counted as GDP then. Its resale does not measure new production.
- Net exports are a country's exports of goods and services less its imports of goods and services. The United States' exports are as much a part of the nation's production as are the expenditures of its own consumers on goods and services made in the United States. Therefore, the United States' exports must be counted as part of GDP. On the other hand, imports, being produced in foreign countries, are part of those countries' GDPs. When Americans buy imports, these expenditures must be subtracted from the United States' GDP, for these expenditures are not made on the United States' production.

If American exports are \$7 billion and imports are \$5 billion, then American net exports are +\$2 billion. If the figures are reversed, so that Americans export \$5 billion and import \$7 billion, then net exports are -\$2 billion—a negative amount. For this to come about, Americans must either decrease their holdings of foreign currencies by \$2 billion, or borrow \$2 billion from foreigners—or do a bit of both. (Another option is to sell back to foreigners some of the previous American investments abroad.)

13. (a) Included. Income received by the bondholder for the services derived by the corporation for the loan of money.
- (b) Excluded. A transfer payment from taxpayers for which no service is rendered (in this year).
- (c) Excluded. Nonmarket production.
- (d) Included. Payment for a final service. You cannot pass on a tooth extraction!
- (e) Excluded. Secondhand sales are not counted; the textbook is counted only when sold for the first time.
- (f) Excluded. A private transfer payment; simply a transfer of income from one private individual to another for which no transaction in the market occurs.
- (g) Included. Payment for the final service of housing.
- (h) Excluded. The production of the car had already been counted at the time of the initial sale.
- (i) Included. It is a new good produced for final consumption.
- (j) Excluded. The effect of the decline will be counted, but the change in the workweek itself is not the production of a final good or service or a payment for work done.
- (k) Excluded. A non-investment transaction; it is merely the transfer of ownership of financial assets. (If AT&T uses the money from the sale of a new bond to carry out an investment in real physical assets, then that will be counted.)
- (l) Included. The increase in inventories could only occur as a result of increased production.
- (m) Excluded. Merely the transfer of ownership of existing financial assets.
- (n) Included. Insurance is a final service. If bought by a household, it will be shown as consumption; if bought by a business, as investment—as a cost added to its real investment in physical capital.