

1. You have been asked by the "boutique" investment banking firm of Dewey, Cheatam, & Howe (DCH) to be their analyst of the peanut butter industry. Indicate your predictions as to the direction of the change in price and the change in quantity in the peanut butter market that would follow from each of the following alternative new events, and explain briefly the logic of your answer (geometry may help, but is not necessary):

- a. Researchers at the NYU Medical School announce that a new study shows that eating peanut butter reduces the risk of getting colon cancer.
- b. The U.S. Department of Agriculture announces the development of a new strain of peanut that will allow higher crop yields for peanuts.
- c. The Monsanto Corp. announces the development of a new strain of wheat that will allow higher crop yields for wheat.
- d. The Oscar Meyer Company announces a new production process that promises to lower the cost of producing hot dogs.

2. You have been switched to the petroleum analysis desk at DCH and have begun to read research studies concerning the retail gasoline market. Economist A claims that the short-run price elasticity of demand for gasoline in the U.S. is -0.1; Economist B claims that this elasticity is -0.4. If a coup d'etat were to occur in Saudi Arabia, disrupting the supply of petroleum to the U.S., which economist would predict a greater price increase? Explain.

3. Consider a competitive market for widgets for which the quantities demanded (in millions) and supplied (per year) at various prices are as given:

<u>Price (\$)</u>	<u>Demand (M)</u>	<u>Supply (M)</u>
60	22	14
80	20	16
100	18	18
120	16	20

- a. What is the equation for demand? What is the equation for supply?
- b. What is the price elasticity of demand when the price is \$80? When the price is \$100?
- c. What is the price elasticity of supply when the price is \$80? When the price is \$100?
- d. What are the equilibrium price and quantity?
- e. Suppose the government sets a price ceiling of \$80? Will there be a shortage, and if so, how large will it be?

4. Baye, page 28, 29, problem 6, 12
5. Baye, page 68, 69, problem 8, 12
6. Baye, page 111, 112, problem 13, 18