1. You are the manager of a 24-hour copy shop that is closed on Sundays. You lease a building for $2,000 per month and hire three employees who each work eight-hour shifts at a wage of $10.00 per hour. The markets for labor and office space are tight in your area. To acquire the lease and hire workers, you signed contracts requiring you to give 12 months advance notice before abandoning your lease or laying off workers (if you fail to comply, the contracts force you to fully compensate your landlord and workers for the income they otherwise would have earned over the 12-month period). Paper costs you $.02 per sheet. You currently sell 500,000 color copies per year at a price of $.10 per copy and 1,000,000 black and white copies per year at a price of $.05 per copy. Because of your high volume, each of your two copiers has a useful life of only one year. You just received a call from an employee who informs you that your color copier just broke down. The good news is that your black and white copier is brand-new; the bad news is that a new color copier will cost $30,000. Should you purchase a new color copier? Explain carefully using the pertinent information. Assume that customers who want color copies are unwilling to substitute black and white copies.
2. Estimates suggest that the North American Free Trade Agreement (NAFTA) will ultimately result in tariff cuts averaging 38 percent globally. Assuming these estimates are correct, would you expect the price of the average imported goods to fall by 38 percent? Explain.
3. You are an aide for the Senate Banking Committee Chairman. He comes to you with a bill that proposes setting limits on what ATM owners can charge nonaccount holders, over and above what banks charge their own customers. Currently, large banks charge noncustomers an average fee of $1.35 per transaction in addition to the fees the customer's own bank imposes. The Senator asks you to look at a proposal that would place a $0.50 cap on the fees ATM owners can charge noncustomer for accessing their money. If this legislation is enacted, what would be the likely effects?
4. Recently, the Brazilian Association of Citrus Exports (Abecitrus) announced that orange production would be down 25 percent this year because of poor weather conditions, disease, and tree stress resulting from three straight bumper crops. What effect will the decreased production of oranges have on the demand for tomato juice?  What would be effect on tomato juice price and quantity sold in the market? (Assume that tomato juice is a substitute for orange juice.)
5. When the price of butter was "low," consumers spent $5 billion annually on its consumption. When the price doubled consumer expenditures increased to $7 billion. Recently you read that this means that the demand curve for butter is upward sloping. Do you agree? Explain.
6. The income elasticity of demand for your firm's product is estimated to be 0.75. A recent report in *The Wall Street Journal* says that national income is expected to decline by 3 percent this year.   
   a. What should you do with your stock of inventories? (Give numeric answer)   
   b. What do you expect to happen to your sales? (Give numeric answer)   
   c. How would you answer parts *a* and *b* if you expected a 5 percent increase in income instead of a decrease?  (Give numeric answer)

1. Suppose you are a manager of a factory. You purchase five (5) new machines at one million dollars each. If you can resell two of the machines for $500,000 each and three of the machines for $200,000 each, what are the sunk costs of purchasing the machines?
2. Standard Enterprises produces an output that it sells in a highly competitive market at a price of $100 per unit. Its inputs include two machines (which cost the firm $50 each) and workers, who can be hired on an as-needed basis in a labor market at a cost of $2,800 per worker. Based on the following production data, how many workers should the firm employ to maximize its profits? (The machines stay at two as you alter other inputs.)  
     
    
3. To open a new business, a manager must obtain a license from the city for $20,000. The license is transferable, but only $3,000 is refundable in the event the firm does not use the license.   
   a. What are the firm's fixed costs? Sunk costs?  
   b. Suppose the manager obtains a license but then decides against opening the business. If another firm offers the manager $2,000 for the license, should the manager accept the offer?
4. In 1995 the U.S. Justice Department sued to block a merger between Microsoft and Intuit, the producer of the nation's best-selling business software. The Justice Department argued that the merger would lessen competition and raise prices of business software. Is there an economic argument that the merger might actually result in lower prices? Explain.
5. According to *Industry Week*, a shoe manufacturer recently had a production run that resulted in 100,000 pairs of defective shoes. Workers on the production line knew the shoes were defective as they were being produced, but did nothing to fix the problem. Do you think a profit sharing plan for workers would mitigate future problems? Explain.
6. As a manager of the WeDoWell Corporation, you have negotiated with several vendors and are on the verge of signing an eight-year contract with Bolts Enterprises. Under the contract, they would ship to you 2,000 titanium bolts per month at a price of $1,000 per bolt. Your assistant has just brought you an article from a trade publication that indicates another company has developed a new technology that reduces the cost of producing the titanium bolts. How would this information affect the optimal length of your contract with Bolts Enterprises? Explain.
7. In many online information markets, we have observed in recent years greatly increased concentration in each market sector. What is the primary reason for the emergence of a dominant firm in each market?
8. Omega Travel competes in the travel market. Consumers know that Omega has the best agents in the industry and offers superior service. Nonetheless, Omega earns zero economic profits because numerous competitors have entered the market over the last few years. Based on this information, what market structure does Omega operate in? Explain briefly.

1. Art-R-Us makes hand-painted art reproductions. The owner-manager wishes to hire another artist, and is considering paying a fixed wage plus either (1) a share of the profits from each painting sold or (2) a fixed payment for each piece produced. Which plan would you choose if you were the owner? Which plan would you favor if you were the artist? Explain.
2. In a 1998 press release, Boeing Commercial Airplane Group (BCAG) announced that it was signing a 10-year contract with distributor Thyssen Inc. - a distributor of raw aluminum - valued at approximately $300 million. The contract reflects Boeing's effort to reduce costs and production bottlenecks resulting from supply shortages. The contract specifies prices and guarantees quantities of raw aluminum to be delivered to BCAG's suppliers. If you were the production manager at BCAG, how would you justify the long-term nature of the contact with Thyssen Inc.?
3. Should the government regulate Google on its services and prices due to Google’s current dominance in several information markets, such as on-line search? Present an argument *either* for doing so or not doing so. (One paragraph maximum, please.)
4. You are a strong advocate for a one-year investment project that would cost your firm $10,000 today, but generate virtually certain earnings of $15,000 at year-end. Those in your firm's financial group concur that the investment is virtually risk-free, but nonetheless your boss is concerned about the firm's cash flow problems. In fact, the problems are so severe that the firm's bank currently charges it 20 percent on one-year loans. Convince your boss to undertake the project.
5. You work for an unemployment agency that distributes unemployment checks to unemployed workers in your state. Your boss recently learned that the President proposed a 21 percent increase in the minimum wage, and wants you to provide her with an estimate of the number of additional workers who will file for unemployment compensation claims next year if the bill passes. Based on library research at a nearby university, you learn that about 200,000 workers in your state earn at or below the current minimum wage. Further library research turns up a study that reports the own price elasticity of demand for minimum wage earners to be -0.30. Based on your findings, how many additional workers do you think will file unemployment claims in your state?  Provide a numeric estimate.
6. “Strategic planning would be greatly improved in most organizations if the ‘ordinary’ employees in the organization were given substantial opportunities to affect the process,” says one consulting guru. But a competing consulting guru says, “No, excessive involvement from these lower level employees would accomplish little because these employees can’t see the big picture. That’s what top management is tasked to do.” Who do you side with and why? (PLEASE keep this answer short—a paragraph will suffice and your reasoning should reflect *economic* thinking on the matter.)

Bonus Question! How rational are you*?* Here’s a scenario for the Holidays: “*You walk into a storefront and notice a beautiful coat that is just the right cut and color and up close it gets even more beautiful. Then you discover that it is twice as expensive as you had originally guessed. After 30 seconds of painful deliberation, you decide that you can’t possible justify paying so much for a coat. When you get home, however, you find out that your significant other has bought you that same exact coat…using money from your joint checking account.”*

Here’s the (drum roll…) question. Would you say…

1. “Honey, this is very nice of you, but I have already weighted the costs and benefits and decided that this coat is not worth the money, so please take it back immediately.”
2. “Thank you so much, I love it!”

May your Christmas offer joy and (non-economic) pleasures…!