

1. How would each of the following circumstances impact the price and quantity of beef sold?
 - a. The price of chicken falls
 - b. The price of grazing land falls
 - c. There is a report that beef consumption increases longevity
 - d. Average incomes rise
 - e. The price of leather, which is produced from hides of beef cattle after they are slaughtered, rises
 - f. A mandatory animal identification system is implemented and costs producers an extra \$3.00 per animal to implement
 - g. Increased beef imports from South America flood the market
 - h. Mad cow disease is found in an American beef cow in Washington

2. Currently, 21 states have a tax specifically focused on soda in an effort to reduce obesity and other adverse health outcomes (for more information, see [Block and Willett, 2012](#)). Assume a 6.0% sales tax is levied on the price of all soda.
 - a. What is the implied impact on the equilibrium quantity and price for soda?
 - b. How might the equilibrium price and quantity change for soda substitutes such as juices and sugar-flavored water?
 - c. A recent study indicated that the demand for low-calorie soda is more elastic than regular soda.
 - i. Explain what this means.
 - ii. How might the response be different for low-calorie soda consumption versus regular soda consumption when considering this sales tax.
 - d. Is this soda tax likely to have a positive impact on lowering obesity rates in the areas it is implemented? Explain why or why not.

3. Suppose you have 30 years of life which can be allocated between leisure and working at a wage of \$10,000 per year.
 - a. Draw your budget constraint between “leisure” and “lifetime income”
 - b. Suppose now that you are given the option to attend college, in which case you will have only 26 years available for leisure and working, but your wage will be \$15,000 per year. Suppose that you are indifferent between attending college and not attending college. Illustrate this situation with budget lines and indifference curves.
 - c. *True or False*: If you attend college, you will definitely spend more time working than if you do not attend college. Justify your answer.

4. Your monthly income is \$48, which you spend on beer and ‘other goods.’ A six-pack of beer costs \$4 and you buy 5 six-packs per month. One day the beer salesman offers you a deal: “If you pay \$10 per month to be in the beer club, you’ll be allowed to buy six-packs of beer for \$2.” Should you join the club? Justify your answer with indifference curves.