Questions based on “Hog Heaven? Study Finds Large Hog Farms Lower Property Values”

1. Suppose the figure below represents the budget constraint and indifference curve for an individual purchasing property in Pennsylvania. Based on what you know from the article, draw on the figure how would the graph change if a hog farm were built near the property being considered. Explain your answer.

Questions based on the Berck and Helfand (B&H) chapter 5
(you can skip or just skim pp 153-163. Start reading again at the top of page 164)
The discussion of several of the graphs refers to shading that may not be visible in the printed version You can access a pdf version of these graphs on the notes page of the class web site.

2. In figures 5.1 and 5.2, what do the bars represent?

3. Using figure 5.2, how much would the individual be willing to pay for an increase of 0.2 MWH if she has already consumed 1.2 MWH? What is the price per MWH that she would be willing to pay?
   ans: 159×0.2
   ans: 159 per MWH
4. Suppose you know an individual’s marginal willingness to pay. How do we obtain the total willingness to pay?

5. For non-rival public goods, how do we obtain the aggregate demand curve?

6. The figure below presents budget constraints and indifference curves for an individual. Her income is $80 and the initial price of the good Q is about $9 as indicated by the line B₁. Then the price of Q increases to about $16 as indicated by the line B₂.

![Graph showing budget constraints and indifference curves](image)

   a. What is the individual’s compensating variation (CV)?
   b. What is the individual’s equivalent variation (EV)?
   c. Complete the following sentences:
      The individual’s _____ is the amount of money that you would have to _____ her in order to make her as well off at the higher price as she was at the initial price.
   d. The individual’s _____ is the amount of money that you could _____ her in and leave her just as well off at the initial prices as she will be at the new price.
   e. The individual’s _____ is the amount of money she would be Willing to Pay to avoid the price increase.
   f. The individual’s _____ is the amount of money she would be Willing to Accept in compensation for a switch to the new prices.

7. Suppose you receive a survey in the mail asking you if you would be willing to pay $25 to help protect the endangered Adler's Mottled Treefrog. Is the surveyor attempting to estimate your compensating or equivalent variation? Explain.