|  |  |
| --- | --- |
| **AP Microeconomics**  Mrs. Shackett  Marginal Analysis | Name |

Knowledge is power! After fully buying in to this old cliché, a student decides to be as knowledgeable as possible by devoting the next 20 years, without interruption, to college. From the hypothetical data below, would you advise this person to reconsider a career as a professional student? Answer the questions that follow.

**Degree earned and expected lifetime earnings and costs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Highest degree earned | Expected lifetime earnings (total benefit) by degree | Marginal benefit of additional degree | Expected lifetime costs (total cost) by degree | Marginal cost of additional degree |
| High school | $600,000 | +$600,000 | $0 | +$0 |
| Associate | $1,200,000 |  | $200,000 |  |
| Bachelor’s | $1,700,000 |  | $500,000 | +$300,000 |
| Master’s | $2,100,000 | +$400,000 | $900,000 |  |
| Doctorate | $2,400,000 |  | $2,400,000 |  |

Complete the table with the missing values of the marginal benefit and marginal cost of earning an additional degree.

1. Would a master’s degree and a doctorate degree increase the human capital of the student?

*(Yes/No)*

1. In the process of building knowledge, would the doctorate degree be the best example of doing a job well? *(Yes/No)*
2. Assuming that inflation and interest rates have been taking into account in these data, what is the optimal degree for this person to earn?
3. Which criterion did you use to determine the optimal degree this person should obtain?

*(Total Benefit = Total Cost / Marginal Benefit = Marginal Cost)*

1. Since inflation is already factored into the data, what is the most likely reason that the costs of a doctorate degree rise to such a high level?
2. Consider an electronic item that you have thought about buying. Do you always choose the highest-priced good? Explain your answer.
3. If you wanted to eliminate “senioritis,” how would you change the college acceptance process and/or the incentives offered by high school instructors?