**Week 4 Discussion**

**"Production Economics and Decisions"** Please respond to the following:

From the scenario for Katrina’s Candies, determine the relevant costs for the expansion decision, and distinguish between the short run and the long run costs. Recommend the key decision-making criteria that Katrina’s Candies should use for expansion decisions in the short run and in the long run. Determine under what conditions a company should (or should not) continue to produce a good or service.

**Option #1:** Test your understanding of implicit costs, explicit costs, accounting profit and economic profit

John works 40 hours a week managing his own business, without drawing a salary. He could be earning $600 a week doing the same job for his former employer. He has invested $100,000 of his own money in his business and owes the bank $100,000.  The interest on his bank debt is $200 a week. If John's accounting profit is $1,000 per week, what is his economic profit?

**Option #2:** Test your understanding of production concepts

Consider the production schedule below. Where is the average product of labor maximized and at what point does diminishing marginal product of labor set in?

Using regression analysis, where labor is the "X" variable, find the best production equation to estimate total output.

|  |  |
| --- | --- |
| output  | labor  |
| 0 | 0 |
| 6 | 1 |
| 16 | 2 |
| 29 | 3 |
| 44 | 4 |
| 55 | 5 |
| 60 | 6 |
| 62 | 7 |
| 62 | 8 |
| 61 | 9 |
| 59 | 10 |