

## Final Exam: Class 15.818

This is a comment posted on a blog by a pricing consultant. Read carefully and then answer the questions below.

One of our recent clients wished to determine the optimum price for their consumer electronics product. Before retaining us, they had been selling the product at \$200 because it felt like a nice round number, and it drove a retail price of \$399.95. They were considering dropping their price to \$170 (for a retail price of \$339.95) to try and improve sales volumes and profitably. We examined the market preferences and buying behavior, and concluded that this company's marketplace (within +/- 15% of the current price) had a price elasticity of 1. This means that a 1% change in price will result in a 1% sales volume. Here is what our research concluded, both for their lower price point, as well as for the optimum price we discovered.

Example A: Lowering Price to Gain Market Share:	Example B: Raising Price to Optimum (based on independent market research)
Cost of your product: \$100 Price of your product: \$200 Gross margin per product: \$100 Price elasticity: 1 Sales volume: 10,000 Revenues: \$2,000,000 Overall gross margin: \$1,000,000 New lower price: \$170 Gross margin per product: \$70 Sales volume: 11,500 Revenues: \$1,955,500 Overall gross margin: \$805,000	Cost of your product: \$100 Price of your product \$200 Gross margin per product: \$100 Price elasticity: 1 Sales volume: 10,000 Revenues: \$2,000,000 Overall gross margin: \$1,000,000 New optimum price: \$230 New gross margin per product: \$130 Sales volume: 8,500 Revenues: \$1,955,500 Overall gross margin: \$1,105,500

So in the first case, lowering the prices by 15% -- a typical quick-fix solution at struggling companies -- and where the company planned to move the price - the sales volume will go up, but the result will be an almost 20% decline in margin. In the second case, market research shows that raising the price 15% to the optimum will instead result in a 10% improvement from the original margins. (For this company, the per-unit cost did not change much depending on volume). And just as important, a nearly 40% rise in margins resulted from the company's "we know that the market will bear" strategy to lower the price. Not bad! Just a little bit of market research, and now everyone at this electronics firm can see that huge holiday bonus coming right around the corner.

### Questions

- 1) Summarize the point the pricing consultant is trying to make about pricing strategies? [20 points]
- 2a) What assumptions is he making when making this point? [30 points]
- 2b) What information would you need to make sure he was correct? [25 points]
- 3) If you were hired as a consultant on this project what **else** would you want to look at and do in order to improve pricing performance? [25 points]

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