

Decision Report 1

MATH 144 Applied Calculus for Business

Test Marketing

Team: _____

Score:

Your company's marketing department has completed a study in a number of test markets for your product around the country. Your marketing data file contains the results of this study, formatted as shown in this example:

Market #	Market Size	Price	Projected Sales
1	144,900	\$265.95	570

In other words, in this example, in test market #1:

1. There were a total of 144,900 potential customers in this test market;
2. A sample of potential customers were asked: *Would you buy our product at \$265.95 each?*
3. Based on their responses, the study predicted a total of 570 items would sell in this test market, at this price.

Your data also indicates the approximate size of the potential *national* market for your product, which is much larger than the test markets studied. Meanwhile, your Vice President of National Sales, excited about your product's sales potential, wants to set a sales goal of **1.5 million** units on the national market for your new product.

Decision: Based on the test marketing data given to your team, write a short memo to manage your Vice President's expectations. Does your data support the possibility of selling 1.5 million units on the national market, if the price was right? How can you tell?

Deliverable: Use the test marketing data to construct a table of national market quantities q (measured in thousands of units), vs. the unit price at which that quantity would sell p (measured in dollars per unit).
