

## Short Assignment 2

- Submit your answers before midnight on January 22, 2009 (so we can discuss the answers in class on January 23, 2009), using the following website:

[https://cebeapps.fuqua.duke.edu/survey/ajax/index.jsp?id=kku\\_476](https://cebeapps.fuqua.duke.edu/survey/ajax/index.jsp?id=kku_476).

The last page of the assignment shows you what the website should look like.

- Consider the problem faced by Sherwin-Williams ([www.sherwin-williams.com](http://www.sherwin-williams.com)) of determining optimal prices for its regular and environmentally friendly paint. Their best-selling interior paint is Superpaint Interior Latex Paint.<sup>1</sup> They do not make any claims about Superpaint being environmentally friendly. A gallon of satin finish Superpaint has a list price of \$44 per gallon.<sup>2</sup>

Sherwin-Williams also offers Duration Home Interior Latex, which it markets under the “GreenSure” label.



Sherwin-Williams describes “GreenSure” as follows:

“To help you easily identify our green coatings we have introduced the GreenSure<sup>TM</sup> designation for our environmentally friendly products. Our Greensure products offer maximum performance, long-term durability and the highest indoor air quality ratings.”<sup>3</sup>

Specifically regarding Duration, they say: “This environmentally preferred product is specially formulated to be low in odor, resist mildew and have lower levels of smog-producing pollutants (volatile organic compounds or VOC’s).”<sup>4</sup>

A gallon of satin finish Duration has a list price of \$47 per gallon.<sup>5</sup>

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<sup>1</sup>[http://www.sherwin-williams.com/do\\_it\\_yourself/sherwin\\_williams\\_products/interior\\_house\\_paint/paints/index.jsp](http://www.sherwin-williams.com/do_it_yourself/sherwin_williams_products/interior_house_paint/paints/index.jsp)

<sup>2</sup>Phone conversation with a local Sherwin-Williams dealer on January 12, 2009.

<sup>3</sup>[http://www.sherwin-williams.com/do\\_it\\_yourself/sherwin\\_williams\\_products/green/index.jsp](http://www.sherwin-williams.com/do_it_yourself/sherwin_williams_products/green/index.jsp)

<sup>4</sup>[http://www.sherwin-williams.com/do\\_it\\_yourself/sherwin\\_williams\\_products/green/index.jsp](http://www.sherwin-williams.com/do_it_yourself/sherwin_williams_products/green/index.jsp)

<sup>5</sup>Phone conversation with a local Sherwin-Williams dealer on January 12, 2009.

- For this assignment, consider the following hypothetical situation:

In an attempt to fine-tune its pricing for Superpaint and Duration, a local Sherwin-Williams outlet collected data on its customers' willingness to pay for Superpaint and for Duration. Customers were asked whether they had attended a four-year college and what their willingnesses to pay were for Superpaint and Duration. They were offered a coupon for participating in the survey. The surveyor also noted whether the customers were male or female. Use the survey results, contained in the file paintdata.xls, to advise the store on its pricing of Superpaint and Duration. Prices should be to the nearest penny, i.e., a price of \$39.99 is fine, but not a price of \$39.995. Assume that the customers surveyed are a representative sample of customers. Calculate the store's revenue from the 60 customers surveyed under your recommended prices.

Note: If you use Excel's Solver, be careful and try a variety of starting values.

## Environmental Economics Short Assignment 2

**Due by midnight on January 22, 2009**

What are your recommended prices for Superpaint and Duration?

What would the store's revenue be from the 60 customers surveyed under these prices?

**Enter your full name (first last):**

**Enter your recommended price for Superpaint:**

**Enter your recommended price for Duration:**

**Enter the store's revenue from the 60 customers surveyed under the prices you entered above:**

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