

Algebra 1

Mathematical Modeling Gas Price Project



Due: Wednesday March 13th (beginning of class)

Gas prices change on a nearly daily basis, and not every gas station offers the same price for a gallon of gas. The gas station selling the cheapest gas may be across town from where you are driving. **Is it worth the drive across town for less expensive gas?** Create a mathematical model that can be used to help understand under what conditions it is worth the drive.

You have to use the Shell Gas station in Notus and then pick a cheaper/cheapest gas station that you choose across town (Nampa/Meridian/Caldwell). This should be the cheapest place that you can find, but still within a reasonable distance away. You need to pick the car you are driving, give the stations/gas price/date of this price, and answer the question:

Is it worth the drive across town for less expensive gas?

Your answer must have justification and clear sufficient evidence backing up your claim.

Perhaps your initial reaction to this question is that you have not been given enough information to answer the question. This is precisely the point! Most word problems you have encountered in math class give you all the information you need to answer the question, but these are not the types of problems that you are likely to encounter when they enter the working world. In this problem, you have to find and research the real life variables (what car, what gas station, etc.) that you need to answer the question and then come up with a solution with evidence to back it up. If you need more information to answer the question, then find the information and use it.

Your final project answer must be put together on a powerpoint slide (min. 3 slides) with all details and evidence backing up your claim.