

# Problem Set 7

AGEC 317

**This problem set refers to “PS7.xlsx”.**

Please complete the work for this Problem Set in a **Microsoft Word or Excel document**, and submit your work with answers to eCampus by **April 14th at 11:59PM**.

You have data on ground coffee purchases for *Wegmans*, a grocery store chain in the Northeastern U.S. Specifically, you have data on all ground coffee purchases for the year 2019 across all Wegmans stores. The variables you have are:

- $QCoffee$ : Quantity of ground coffee purchased on a given purchase occasion (shopping trip), in ounces
- $PCoffee$ : The price of the purchased coffee, in USD/oz
- $Pmilk$ : the price of 2% milk faced by the customer on the shopping trip
- $Ptea$ : the average price of loose-leaf tea on the shopping trip
- $Income$ : the income of the shopper, in USD
- $illy, Costa, \dots, Caribou$ : indicators for the coffee brand. **The omitted base category is Wegmans in-house brand: Weggie.**
- $Q2, Q3, Q4$ : indicators for the financial quarter. **The omitted base category is Q1.**

**SHOW YOUR WORK for the following questions:**

1. Is demand for coffee elastic or inelastic?
2. Should Wegmans consider putting coffee on sale? Why or why not?
3. If dairy production is reduced by COVID-19, should Wegmans be concerned with the effect of the resulting higher price of milk on coffee demand? Why or why not?
4. Is demand for illy coffee higher or lower than demand for Weggies coffee? By how much? (You need to give a %)
5. Does demand for coffee in quarter 2 shift in or out, compared to quarter 1? (In other words, is demand higher or lower in quarter 2 compared to quarter 1?) By how much?