Answering sheet Asignment Marketing Models

Student information

Name: Name
Student Number: Student number

Details Data

Number of the dataset used for solving the exercise: 66

Details Coding

Which computer language/program did you use?: R
What was the version number of the software that you used?: 4.1.2

Estimation Results:
Fill in the next table using your estimation output:

parameter	ML estimate	standard error
Heinz 28 ounces	0	N.A.
Heinz 32 ounces	-0.8947100961487(	0.09078773535922
Heinz 40 ounces	-1.1508369215981	0.10473944402349
Hunts 32 ounces	-2.4579752240899	0.11385089326557
price	-137.11992663428	6.85325587542014
display	0.81095110301065	0.11362770099478
feature	0.96485724588862	0.13439552436896

Maximum Log Likelihood value: -1800.0352388451

McFadden R^2: 0.18996475924589

Partial Effects:
Fill in the table with average partial effects of prices where element (j,k) denotes the marginal change in the choice probability of brand j due to a change in the price of brand k.

	average partial effects of price			
brand	Heinz 28 ounces	Heinz 32 ounces	Heinz 40 ounces	Hunts 32 ounces
Heinz 28 ounces	-21.876103342197	15.7184000135881	2.35756186362881	3.80014146498082
Heinz 32 ounces	15.7184000135881	-26.296718204561	4.07988049579606	6.49843769517717
Heinz 40 ounces	2.35756186362881	4.07988049579606	-7.3739069276620	0.93646456823717
Hunts 32 ounces	3.80014146498082	6.49843769517717	0.93646456823717	-11.235043728395

Effects of Hunts display promotion:
Fill in the table with the average effects of a display promotion for Hunts 32 ounces (with no feature promotion for Hunts and no feature nor display promotion for any other brand-sizes) on the probabilities of all 4 brand-sizes relative to a scenario in which there are no feature nor display promotions for any brand-sizes (including Hunts).

brand	Heinz 28 ounces	Heinz 32 ounces	Heinz 40 ounces	Hunts 32 ounces
Effect	-0.03057234091198	-0.0525306469333	-0.0074135042262	0.09051649207162

Hausman Test:
Test the assumption of the independence of irrelevant alternatives by implementing a Hausman test comparing the unrestricted model with a restricted model that does not include the Heinz 40 ounces observations.

Test Statistic	8.63347871599971
P-value	0.12460723196410