Ice Cream Analysis Report

Executive Summary

An ice cream company wants to boost its margin profits through formulating differential pricing strategies and carrying out effective coupon promotion activities. To help them achieve their goal, we analyzed a transaction dataset containing transaction features such as 'price paid', 'total spend', product features such as 'flavor', 'size', and demographic features of households such as 'income', 'age', and we build multiple regression models to explore factors that will impact customers' willingness to pay, dictated by 'price paid per unit'. Moreover, we design Difference-in-Difference analysis to help them study the causal effect of coupons to different customer groups, which is not obtainable by simply building regression models.

Major findings of our analysis are as follows:

- (1) Product features such as flavor and size have significant impacts on customers' willingness to pay
- (2) Demographic features of households such as income, region and household size have significant impacts on customers' willingness to pay
- (3) Positive interaction exists between coupon and central region regarding impacts on 'price per unit'

Recommendations are given as follows:

- (1) Apply differential pricing strategies to different flavors of ice cream, different regions and customers with different levels of income
- (2) Collect panel data and conduct Difference-in-Difference analysis to analyze causal effects of coupon to different customer groups, through which they can improve the effectiveness of promotion activities

Introduction

An ice cream company is seeking ways to formulate differential pricing strategies for different customer groups and improve coupon promotion activities to maximize margin profits. To help them achieve the goal, our analysis will mainly focus on building linear regression models to explore factors that might impact customers' willingness to pay and providing recommendations on making smarter pricing strategies based on customer segmentations. Moreover, we also suggest other statistic methods to help them better explore how to enhance the efficiency of their promotion activities such as offering coupons to customers with high purchase potential more precisely.

Data Characteristics and Exploration

The dataset contains 2,1975 rows of transaction records along with demographic information of 6385 households. There are 37 variables in total, among which transaction data such as price paid, coupon value, features of products such as flavor, size and quantity of ice cream and demographic data of households such as income, region, race, age, gender are included.

We calculate 'price per unit' for each deal as target variable Y and use other variables as explanatory variables X. Then we conducted exploratory analysis on relations between target variable and other variables. Here are what we found. Among all the explanatory variables, 'coupon value' positively correlated with 'price per unit', indicating that higher coupon value may encourage customers to pay higher price per unit.

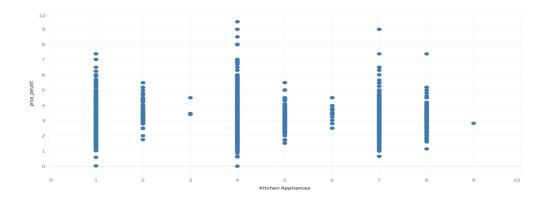
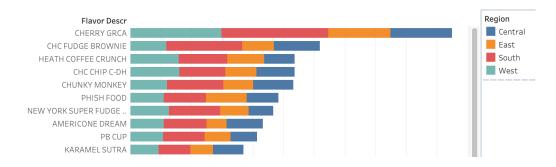


Chart above shows that 'price per unit' also varies a lot when the household owns different kinds of kitchen appliances such as microwave and dishwasher, showing that families holding different machines may have different purchasing power.



Also, as the horizontal bar chart shows, 'Cherry Grca' is the most popular flavor across all regions, but different regions have different preference for different ice cream flavors.

Model Selection, Evaluation and Interpretation

Multiple regression model is chosen in this case since it enables us not only to identify the significance of each independent variable but also to quantify the degree of impact on the dependent variable of our interest, thereby increasing the power of interpretation. 'Price per unit' is chosen as target variable Y to reflect customers' willingness to pay since it eliminates the effects of quantity on price. 15 variables such as 'flavor', 'coupon', 'marital status', 'Hispanic origin' are chosen as independent variables.

After creating dummy variables for categorical variables, there are 69 independent variables in total.

Results of the primary regression model shows that whether the household is from a Hispanic origin or whether it has dishwasher or not are two regressors with insignificant p-value. These two variables should be removed because they do not influence target variables. Moreover, variables such as whether there is a promotion, household composition, age, and presence of children are added as they are logically significant and have high correlations with 'price per unit'.

However, in order to improve the performance of the model and minimize the possibility of overfitting and underfitting, stepwise regression method is deployed. And 13 independent variables out of 16 are retained. Moreover, interaction terms of 'coupon per unit' across region, and 'coupon per unit' across race which have statistically significant impact on 'price per unit' are added.

According to the final model, the features of ice cream such as flavor and size do have significant impacts on target variable. Specifically, some flavors increase customers' willingness to pay higher price. Assuming the cost of the production hold constant, the company is advised to produce more ice creams with popular flavors among customers. In addition, there are several demographic variables showing statistically significant impacts on 'price per unit'. Variables such as income, region, and household size are of operational use. For example, these demographic characteristics can be utilized by the company to segment customers and apply differential pricing strategies.

Since we included 76 independent variables in total, it is possible that some unnecessary variables with little explanatory power are mistakenly included in the model.

Based on the significant level of 95%, the false positive rate is approximately 8%, which means that approximately 3 out of 32 significant variables under the significant level of 95% are in fact non-significant. Since 3 false positive variables seems acceptable, we keep the criteria of 95% significance level.

Coupons can help almost every business type and size. A successful coupon marketing strategy not only drives sales, but also helps build brand image. The scatter plot of coupon value and price per unit shows a strong positive correlation. Therefore, it is beneficial to focus on studying the causal effects of coupon value with difference-indifference (DID) technique. In order to further validate both the significance and the direction of the impact of certain variables that might be vital in our implementation of strategy, we designed a difference-in-difference (DID) experiment to identify the causal relationship between those variables and 'price per unit'. To do the DID analysis, customers are divided into two groups based on region. Then take months (June, July, and August) in summer quarter in one year as the panel data since a year is too long to conduct an experiment and sales of ice cream varies greatly across quarters. For the preintervention period, the company does not give any coupon, and gives coupon to the treatment group, for example, households with children, at the middle of July. By performing DID analysis described above for two groups individually, we can get the effects of giving coupon on them. After that, comparison of the effects will reveal customers in which region should be given coupons to maximize the margins.

Recommendation

Based on our analysis, in order to fully exploit customers' surplus, the company can apply different pricing strategy to different flavors of ice cream, location, and

customers with different levels of income. Specifically, the company can increase the price of ice cream with coffee flavor, ice cream sold in east region, and target coupon at customer with lower income.

In addition, there exists positive interaction between coupon and central region of impact on 'price per unit'. In other words, handing out coupon can bring company more business value in the central region, therefore company is advised to target the coupon at customers who lives in central region.

Conclusion

In this report, we aim to provide analysis support for formulating differential pricing strategies and effective promotion coupon activities. We build multiple regression models to explore factors that impact customers' willingness to pay and we found that flavor and size of ice cream do have significant impacts on customers' willingness to pay. Demographic variables such as income, region and household size show statistically significant impact on customers' willingness to pay.

Based on the findings, we provide four recommendations:

- (1) set higher prices for popular flavors of ice cream, for example, coffee flavor
- (2) set higher prices in regions where customers' willingness to pay is higher, for example, east region
 - (3) give out more coupons to customers with lower income, for example, students
- (4) collect panel data and carry out Difference-In-Difference analysis to study coupon's causal effect on customers of different age groups or region groups and give out coupons to groups with higher positive effect

Appendix

a. Equation of the Final model:

$$\begin{split} \log(PricePerUnit) &= \beta_0 + \beta_1 Size + \beta_2 CouponPerUnit + \beta_3 HasPromotion + \beta_4 Region \\ &+ \beta_5 Flavor + \beta_6 UseCoupon + \beta_7 HouseholdComposition + \beta_8 HouseholdIncome \\ &+ \beta_9 Microwave + \beta_{10} SFH + \beta_{11} Race + \beta_{12} HouseholdSize + \beta_{13} TVCablb \\ &+ \beta_{14} CouponPerUnit * Region + \beta_{15} CouponPerUnit * Rac \\ &+ intercept + \epsilon_t \end{split}$$

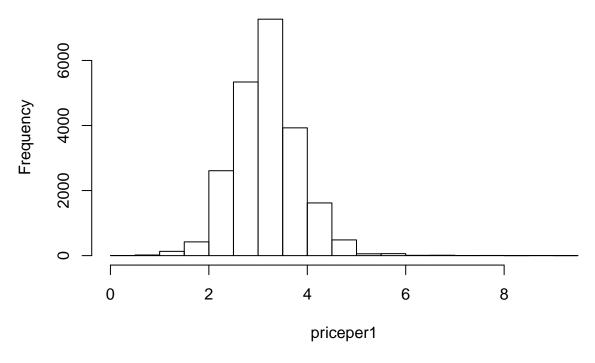
$ice_cream_modified.R$

user

2020-01-09

```
#### Purchases of Ice Cream
ice = read.csv("ice cream.csv")
## explore
names(ice)
   [1] "quantity"
##
                                      "price_paid_deal"
   [3] "price_paid_non_deal"
                                      "coupon_value"
  [5] "promotion_type"
                                      "total_spent"
## [7] "size1_descr"
                                      "flavor_descr"
## [9] "formula_descr"
                                      "household id"
## [11] "household_size"
                                      "household_income"
## [13] "age_of_female_head"
                                      "age_of_male_head"
## [15] "age_and_presence_of_children"
                                      "male_head_employment"
## [17] "female_head_employment"
                                      "male_head_education"
## [19] "female head education"
                                      "marital status"
## [21] "male_head_occupation"
                                      "female_head_occupation"
## [23] "household_composition"
                                      "race"
## [25] "hispanic_origin"
                                      "region"
## [27] "scantrack_market_identifier"
                                      "projection_factor"
## [29] "fips_state_code"
                                      "fips_county_code"
## [31] "census_tract_county_code"
                                      "type_of_residence"
## [33] "kitchen_appliances"
                                      "tv_items"
## [35] "female_head_birth"
                                      "male_head_birth"
## [37] "household_internet_connection"
## create a new variable for price per unit
priceper1 = (ice$price_paid_deal + ice$price_paid_non_deal) / ice$quantity
y <- log(1 + priceper1)
## Check the distribution of price per unit before and after log transformation #
hist(priceper1)
```

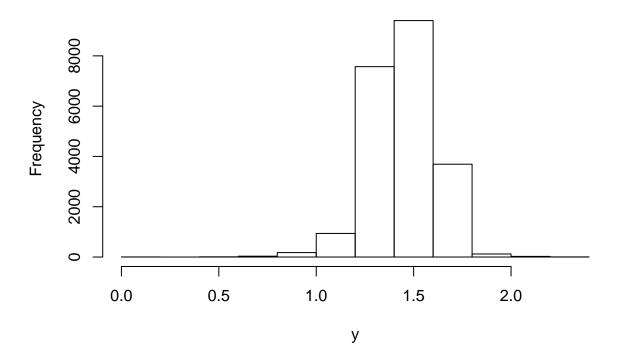
Histogram of priceper1



```
hist(y)
## collect some variables of interest
## create a data.frame
x <- ice[ ,c("flavor_descr", "size1_descr", "household_income", "household_size")]
## relevel 'flavor' to have baseline of vanilla
x$flavor_descr <- relevel(x$flavor_descr, "VAN")</pre>
## coupon usage
x$usecoup = factor(ice$coupon_value > 0)
x$couponper1 <- ice$coupon_value / ice$quantity</pre>
## organize some demographics
x$region <- factor(ice$region, levels=1:4, labels=c("East", "Central", "South", "West"))</pre>
x$married <- factor(ice$marital_status==1)</pre>
x$race <- factor(ice$race, levels=1:4, labels=c("white", "black", "asian", "other"))</pre>
x$microwave <- ice$kitchen_appliances %in% c(1,4,5,7)
x$sfh <- ice$type of residence == 1
x$internet <- ice$household_internet_connection == 1</pre>
x$tvcable <- ice$tv_items > 1
## Add new variables to the regression model
                                                                        #
promo <- ice$promotion_type</pre>
                                                                        #
                                                                        #
promo[is.na(promo)] <- 0</pre>
x$haspromo <- factor(promo > 0)
```

```
x$household_composition <- factor(ice$household_composition)  #
x$age_and_presence_of_children <- ice$age_and_presence_of_children  #
### Run Stepwise Regression  #
df <- data.frame(cbind(y,x))  #
model <- lm(y ~ ., data = df)  #
k <- olsrr::ols_step_both_p(model, prem = 0.10, pent = 0.10, details = TRUE)  #</pre>
```

Histogram of y



```
## Stepwise Selection Method
##
## Candidate Terms:
##
## 1. flavor_descr
## 2. size1_descr
## 3. household_income
## 4. household_size
## 5. usecoup
## 6. couponper1
## 7. region
## 8. married
## 9. race
## 10. microwave
## 11. sfh
## 12. internet
## 13. tvcable
```

```
## 14. haspromo
## 15. household_composition
## 16. age_and_presence_of_children
## We are selecting variables based on p value...
##
## Stepwise Selection: Step 1
## - size1_descr added
##
                    Model Summary
## -----
                  0.261 RMSE
0.068 Coef. Var
0.068 MSE
0.068 MAE
## R
                                           0.151
## R-Squared
                                         10.424
## Adj. R-Squared
                                           0.023
## Pred R-Squared
                                           0.114
## -----
## RMSE: Root Mean Square Error
## MSE: Mean Square Error
## MAE: Mean Absolute Error
##
##
                          ANOVA
##
             Sum of
                        DF Mean Square
           Squares
                                          F
                                                  Sig.
## ------
## Regression 36.544
## Residual 501.938
## Total 538.482
                        1
                   21972
                                36.544
                                       1599.674
                                                0.0000
                                  0.023
                     21973
##
                             Parameter Estimates
             model Beta Std. Error Std. Beta
                                                       Sig lower upper
  (Intercept) 1.445
                             0.001
                                             1404.937 0.000
##
##
##
## Stepwise Selection: Step 2
## - couponper1 added
##
                   Model Summary
## -----
## R.
                    0.292
                           RMSE
                                           0.150
## R-Squared 0.085 Coef. Var
## Adj. R-Squared 0.085 MSE
## Pred R-Squared 0.085 MAE
                                         10.325
                                          0.022
```

RMSE: Root Mean Square Error

			ANOV							
	Sum of						Sig.	_		
Pogragaion								-		
Residual						1020.	0.0000			
	538.482	21	.973							
					meter Es			-		
	model	Beta	Std.	 Erro	 r Std	 . Beta	t	Sig	lower	uppe
							 1374.015			
size1 descr	32.0 MLN7	0.318		0.00	- 8	0.261	1374.015 40.482	0.000	0.303	0.3
CC	oubouber r	0.040		0.00	2	0.133	20.550	0.000	0.036	0.0
		Model S								
R		0.292	D	MOE		_				
P-Sauszad			11	MDE		0.1	L50			
R-Squared		0.085	C	oef.	Var					
Adj. R-Squar	red	0.085 0.085	C M	oef. SE	Var		325			
Adj. R-Squar Pred R-Squar	red red	0.085 0.085 0.085	C M M	oef. SE AE		10.3 0.0 0.1	325 022 113			
Adj. R-Squar	ced ced Mean Square Square Erron	0.085 0.085 0.085 e Error	C M M	oef. SE AE		10.3 0.0 0.1	325 022 113			
Adj. R-Squar Pred R-Squar 	red red Mean Square Square Erron Absolute Err	0.085 0.085 0.085 	M M 	oef. SE AE 		10.3	325 022 113 			
Adj. R-Squar Pred R-Squar 	ced ced Mean Square Square Erron	0.085 0.085 0.085 	M M 	oef. SE AE 		10.3	325 022 113 	-		
Adj. R-Squar Pred R-Squar RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Square Error Absolute Error Sum of Squares	0.085 0.085 0.085 	ANOV	oef. SE AE 	Square 23.005	10.3	325 022 113 Sig.	-		
Adj. R-Squar Pred R-Squar RMSE: Root MSE: Mean S MAE: Mean R Regression Residual	Mean Square Square Error Sum of Squares 46.010 492.472	0.085 0.085 0.085 e Error r	ANOV DF 2	oef. SE AE 	Square	10.3 0.0 0.3	325 022 113 Sig.	-		
Adj. R-Squar Pred R-Squar RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Square Error Absolute Error Sum of Squares	0.085 0.085 0.085 e Error r	ANOV DF	oef. SE AE 	Square 23.005	10.3 0.0 0.3	325 022 113 Sig.	-		
Adj. R-Squar Pred R-Squar RMSE: Root MSE: Mean S MAE: Mean R Regression Residual	Mean Square Square Error Sum of Squares 46.010 492.472	0.085 0.085 0.085 e Error r	ANOV DF 2	oef. SE AE A Mean	Square 23.005 0.022	10.3 0.0 0.3 F 1026.3	325 022 113 Sig.	-		
Adj. R-Squar Pred R-Squar RMSE: Root MSE: Mean S MAE: Mean R Regression Residual	Mean Square Square Error Sum of Squares 46.010 492.472	0.085 0.085 0.085 e Error r	ANOV DF 2	oef. SE AE A Mean	Square 23.005	10.3 0.0 0.3 F 1026.3	325 022 113 Sig.	-		
Adj. R-Squar Pred R-Squar RMSE: Root MSE: Mean S MAE: Mean R Regression Residual	Mean Square Square Error Sum of Squares 46.010 492.472	0.085 0.085 0.085 e Error r	ANOV DF 2 971 973	oef. SE AE A Mean	Square 23.005 0.022	10.3 0.0 0.3 F 1026.3	325 022 113 Sig.	- - Sig	lower	 upp
Adj. R-Squar Pred R-Squar RMSE: Root MSE: Mean S MAE: Mean S MAE: Mean S Compared to the service of the service	Sum of Squares 46.010 492.472 538.482 model	0.085 0.085 0.085 	ANOV DF 2 971 973	oef. SE AE Mean Para Erro	Square 23.005 0.022 meter Es	10.3 0.0 0.3 F 1026.3	Sig.	-	lower 1.438	upp
Adj. R-Squar Pred R-Squar Pred R-Squar RMSE: Root MSE: Mean S MAE: Mean S MAE: Mean S Total Total Total Total Total Total	Sum of Squares 46.010 492.472 538.482 model	0.085 0.085 0.085 e Error ror	ANOV DF 2 971 973	oef. SE AE A Mean Para Erro	Square 23.005 0.022 meter Es- r Std	10.3 0.0 0.3 F 1026.3	Sig.	- Sig		

```
##
##
## Stepwise Selection: Step 3
## - haspromo added
##
                   Model Summary
## -----
                   0.314 RMSE
0.099 Coef. Var
0.099 MSE
## R
                                         0.149
## R-Squared
                                        10.251
## Adj. R-Squared
                  0.099
                                         0.022
                  0.098 MAE
## Pred R-Squared
                                         0.113
## -----
## RMSE: Root Mean Square Error
## MSE: Mean Square Error
## MAE: Mean Absolute Error
##
##
                         ANOVA
## -----
            Sum of
##
            Squares
                      DF Mean Square F
                      3
                                17.704 801.34 0.0000
## Regression 53.111
## Residual
                     21970
            485.371
                                0.022
## Total
            538.482
                     21973
##
                              Parameter Estimates
            model Beta
                         Std. Error Std. Beta
                                                                    upper
##
        (Intercept)
                   1.454
                              0.001
                                             1103.702 0.000
                                                            1.452
                                                                    1.457
                             0.008
                                      0.254 39.545 0.000 0.294
## size1_descr32.0 MLOZ 0.309
                                                                   0.325
        couponper1 0.051
                            0.002
                                      0.168
                                              25.028 0.000 0.047
##
                                                                   0.055
       haspromoTRUE -0.038
                          0.002 -0.120 -17.928 0.000 -0.042
                                                                   -0.034
## -----
##
##
##
##
                   Model Summary
                   0.314
## R
                          RMSE
                                          0.149
             0.314 RMSE
0.099 Coef. Var
0.099 MSE
0.098 MAE
## R-Squared
                                        10.251
## Adj. R-Squared
                                         0.022
## Pred R-Squared
                                         0.113
## ---
## RMSE: Root Mean Square Error
## MSE: Mean Square Error
## MAE: Mean Absolute Error
##
##
                         ANOVA
## -----
##
            Sum of
                   DF Mean Square F Sig.
##
            Squares
```

Residual Total	485.371 538.482	219 [°] 219 [°]	73	.704 801.34 .022	0.0000			
			Parame	eter Estimates				
	model	Beta	Std. Error	Std. Beta	t	Sig	lower	uppe
			0.001		1103.702			
				0.254			0.294	
co				0.168				
	promoTRUE		0.002	-0.120	-17.928 		-0.042 	-0.03
Stepwise Sel	ection: St	ep 4						
- region add	led							
		Model Su						
 R		0.324		0.148				
R-Squared		0.105	Coef. Var	10.21	5			
Adj. R-Squar	ed	0.105	MSE	0.02	2			
Dred D-Cause	-0d	0 104	MATI		_			
Pred R-Squar 				0.112	2			
	Mean Square Gquare Erro	e Error r	MAE		2 			
RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Square Erro Obsolute Err	e Error r ror	ANOVA					
RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Square Erro bsolute Erro Sum of	e Error r ror	ANOVA					
RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Square Erro Solute Erro Sum of Squares	e Error r ror	ANOVA					
RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Square Erro Solute Erro Sum of Squares	e Error r ror	ANOVA DF Mean Squ					
RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Square Erro Solute Erro Sum of Squares	e Error r ror	ANOVA DF Mean Squ 6 9	nare F	Sig.			
RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Guare Error Sum of Squares	e Error r ror	ANOVA 	nare F	Sig.			
RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Error bsolute Error Sum of Squares 56.531	e Error r ror	ANOVA 	nare F	Sig.			
RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Error bsolute Error Sum of Squares 56.531	e Error r ror	ANOVA DF Mean Squ 6 9 67 0	nare F 	Sig.			
RMSE: Root MSE: Mean S MAE: Mean A Regression Residual	Mean Square Square Error Sum of Squares 56.531 481.951 538.482	e Error r ror	ANOVA DF Mean Squ 6 9.67 0.73	nare F	Sig.			
RMSE: Root MSE: Mean S MAE: Mean A	Mean Square Square Error Sum of Squares 56.531 481.951 538.482	e Error r ror	ANOVA DF Mean Squ 6 9.67 0.73	nare F 	Sig.	Sig	lower	 uppe1
RMSE: Root MSE: Mean S MAE: Mean A Regression Residual Total	Mean Square Error bsolute Error Squares 56.531 481.951 538.482 model	e Error r ror 219 219 219	ANOVA DF Mean Squ 6 9. 67 0. 73 Paramet Std. Error	nare F .422 429.439 .022 .cer Estimates	Sig. 0.0000		lower 1.473	
RMSE: Root MSE: Mean S MAE: Mean A Regression Residual Total	Mean Square Error shoolute Error Sum of Squares 56.531 481.951 538.482 model	e Error r ror 219 219	ANOVA DF Mean Squ 6 9.67 0.73	nare F .422 429.439 .022 .cer Estimates	Sig. 0.0000	Sig 0.000 0.000		1.482
RMSE: Root MSE: Mean S MAE: Mean A Regression Residual Total (In	Mean Square Error shoolute Error Sum of Squares 56.531 481.951 538.482 model	e Error r ror 219 219 219 1.477	ANOVA DF Mean Squ 6 9 9 67 0 73 Paramet Std. Error 0.002	nare F .422 429.439 .022	Sig. 0.0000 t	0.000	1.473	1.482
RMSE: Root MSE: Mean A MAE: Mean A Regression Residual Total (In size1_descr3	Mean Square Square Error Sum of Squares 56.531 481.951 538.482 model stercept)	219 219 219 	ANOVA DF Mean Squ 6 9. 67 0. 73 Paramet Std. Error 0.002 0.008	nare F .422 429.439 .022	Sig. 0.0000 t 615.754 38.809	0.000	1.473 0.288	1.482 0.319 0.055
RMSE: Root MSE: Mean A MAE: Mean A Regression Residual Total (In size1_descr3 co hasp	Mean Square Error bsolute Error Sum of Squares 56.531 481.951 538.482 model stercept) 62.0 MLOZ buponper1	219 219 219 219 0.303 0.051	ANOVA DF Mean Squ 6 9.67 0.73 Paramet Std. Error 0.002 0.008 0.002	nare F .422 429.439 .022	Sig. 0.0000 t 615.754 38.809 25.229	0.000 0.000 0.000	1.473 0.288 0.047	1.482 0.319 0.055 -0.037
RMSE: Root MSE: Mean A MAE: Mean A Regression Residual Total (In size1_descr3 co hasp regio reg	Mean Square Guare Error Sum of Squares 56.531 481.951 538.482 model stercept) 32.0 MLOZ Suponper1 promoTRUE	E Error r ror 219 219 219 0.303 0.051 -0.041	ANOVA DF Mean Squ 6 9.67 0.73 Paramet Std. Error 0.002 0.008 0.002 0.002	nare F .422 429.439 .022	Sig. 0.0000 t 615.754 38.809 25.229 -19.097	0.000 0.000 0.000 0.000	1.473 0.288 0.047 -0.045	upper 1.482 0.319 0.055 -0.037 -0.023 -0.028

Model Summary ## ______ 0.324 RMSE 0.148 Coef. Var MSE 10.215 0.105 ## R-Squared ## Adj. R-Squared 0.105 0.022 ## Pred R-Squared 0.104 MAE 0.112 -----## RMSE: Root Mean Square Error ## MSE: Mean Square Error ## MAE: Mean Absolute Error ## ## ANOVA ## Sum of Squares Sig. DF Mean Square F ## ------## Regression 56.531 6 9.422 429.439 0.0000 ## Residual 481.951 21967 0.022 ## Total 21973 538.482 ## Parameter Estimates Beta Std. Error Std. Beta Sig model lower upper 615.754 0.000 (Intercept) 1.477 0.002 1.473 1.482 0.303

 0.249
 38.809
 0.000

 0.168
 25.229
 0.000

 0.288 ## size1_descr32.0 MLOZ 0.008 0.319 ## couponper1 0.051 0.002 0.047 0.055 ## haspromoTRUE -0.041 0.002 -0.129 -19.097 0.000 -0.045-0.037 ## regionCentral -0.029 0.003 -0.078 -9.580 0.000 -0.035 -0.023 -0.028 ## regionSouth -0.034 0.003 -0.100 -11.860 0.000 -0.040 -6.513 ## -0.019 0.003 -0.054 0.000 -0.025 regionWest -0.013## ## ## ## Stepwise Selection: Step 5 ## - flavor_descr added ## Model Summary ## -----0.339 RMSE ## R 0.147 ## R-Squared Coef. Var 0.115 10.170 ## Adj. R-Squared 0.113 MSE 0.022 ## Pred R-Squared -Inf MAE 0.111 ## RMSE: Root Mean Square Error

MSE: Mean Square Error
MAE: Mean Absolute Error

##										
##			ANOVA							
##								_		
##		Sum of			~	_	~.			
##		Squares	DF	Mean	Square	F	Sig.			
##	Regression	61 8/1	 55		1.124	51.704	0.0000	_		
	•	476.641	21918		0.022	31.704	0.0000			
	Total	538.482	21973		0.022					
##								_		
##										
##					Pa	rameter	Estimates			
##										
##				model	Beta	Std.	Error	Std. Beta	t	Sig
##										
##			(Inter	_	1.509		0.007	0.040	223.644	0.000
##		S	size1_descr32.0				0.008	0.248	37.323	0.000
## ##			coupo hasprom	nper1	0.050		0.002	0.167	25.034	0.000
##			regionCe		-0.043 -0.026		0.002 0.003	-0.134 -0.069	-19.786 -8.496	0.000
##			region		-0.031		0.003	-0.091	-10.747	0.000
##			regio		-0.018		0.003	-0.052	-6.282	0.000
##		flavor o	descrAMERICONE				0.008	-0.037	-3.576	0.000
##		_	or_descrBANANA		-0.047		0.009	-0.049	-5.314	0.000
##			vor_descrBLACK		-0.095		0.030	-0.020	-3.135	0.002
##		flavor	_descrBROWNIE B	ATTER	-0.007		0.014	-0.004	-0.495	0.620
##		flavo	or_descrBUTTER	PECAN	-0.010		0.012	-0.007	-0.890	0.373
##		flav	vor_descrCAKE B	ATTER	-0.045		0.010	-0.038	-4.559	0.000
##			flavor_des		-0.002		0.016	-0.001	-0.093	0.926
##		_	scrCHC ALMOND N		-0.019		0.015	-0.009	-1.258	0.208
##			r_descrCHC CHIP		-0.028		0.008	-0.039	-3.555	0.000
##		_	scrCHC FUDGE BR		-0.032		0.008	-0.048	-4.182	0.000
##			vor_descrCHERRY		-0.034		0.007	-0.063	-4.618	0.000
## ##			or_descrCHUBBY r_descrCHUNKY M		-0.013 -0.039		0.011 0.008	-0.010 -0.053	-1.213 -4.869	0.225 0.000
##			r_descrononki M r_descrCINNAMON		-0.053		0.008	-0.054	-5.794	0.000
##		114701	flavor descrC		0.028		0.021	0.009	1.348	0.178
##		flavo	or_descrCREME B		-0.053		0.009	-0.048	-5.590	0.000
##	f		OUBLE CHC FUDG		0.019		0.148	0.001	0.130	0.896
##		_	descrDUBLIN MUD		-0.018		0.010	-0.015	-1.806	0.071
##		flav	or_descrFOSSIL	FUEL	-0.047		0.017	-0.019	-2.717	0.007
##		fla	avor_descrHALF	BAKED	-0.040		0.009	-0.045	-4.661	0.000
##	flavor_desc	rHEATH CANDY	Y EVERYTHING BU	T THE	-0.039		0.009	-0.039	-4.305	0.000
##			CHEATH COFFEE C		-0.024		0.008	-0.033	-3.030	0.002
##			or_descrHEATH C		-0.002		0.009	-0.002	-0.267	0.789
##	fl	_	MAGINE WHIRLED		-0.045		0.009	-0.048	-5.152	0.000
##			r_descrKARAMEL		-0.034		0.008	-0.040	-4.059	0.000
##		_	_descrMAGIC BRO		-0.044		0.012	-0.027	-3.572	0.000
## ##			_descrMINT CHC rNEAPOLITAN DYN		0.012 -0.024		0.014 0.013	0.006 -0.014	0.850 -1.896	0.395 0.058
##		_	RK SUPER FUDGE		-0.024		0.013	-0.014	-4.438	0.000
##			DATMEAL COOKIE		-0.024		0.000	-0.014	-1.924	0.054
##	_		descrONE CSK BR		-0.062		0.009	-0.062	-6.884	0.000
##	fla		FORD MINT CHC C		-0.028		0.010	-0.021	-2.643	0.008

##	flavor_descrPB CUP	-0.031	0.008	-0.038	-3.777	0.000
##	flavor_descrPB TRUFFLE	-0.092	0.148	-0.004	-0.620	0.535
##	flavor_descrPHISH FOOD	-0.024	0.008	-0.032	-3.002	0.003
##	flavor_descrPISTACHIO PISTACHIO	-0.028	0.009	-0.032	-3.325	0.001
##	flavor_descrPUMPKIN CSK	-0.107	0.014	-0.055	-7.695	0.000
##	flavor_descrRSP CHC CHUNK	-0.002	0.018	-0.001	-0.085	0.932
##	flavor_descrSMORES	0.009	0.012	0.005	0.735	0.462
##	flavor_descrSTR	0.048	0.045	0.007	1.064	0.287
##	flavor_descrSTR CSK	-0.049	0.009	-0.047	-5.318	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.022	0.041	-0.003	-0.519	0.603
##	flavor_descrSWEET CREAM & COOKIES	0.032	0.036	0.006	0.887	0.375
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.033	0.017	-0.013	-1.953	0.051
##	flavor_descrTURTLE SOUP	-0.055	0.012	-0.033	-4.475	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.037	0.011	-0.027	-3.457	0.001
##	flavor_descrVERMONTY PYTHON	-0.023	0.014	-0.011	-1.576	0.115
##	flavor_descrW-N-C-P-C	-0.038	0.009	-0.042	-4.411	0.000
##	flavor_descrWHITE RUSSIAN	0.164	0.148	0.007	1.112	0.266
##						
##						

##
##
##
Model Summary

##				
##	R	0.339	RMSE	0.147
##	R-Squared	0.115	Coef. Var	10.170
##	Adj. R-Squared	0.113	MSE	0.022
##	Pred R-Squared	-Inf	MAE	0.111
##				

RMSE: Root Mean Square Error
MSE: Mean Square Error
MAE: Mean Absolute Error

##

ANOVA

##						
##		Sum of				
##		Squares	DF	Mean Square	F	Sig.
##						
##	Regression	61.841	55	1.124	51.704	0.0000
##	Residual	476.641	21918	0.022		
##	Total	538.482	21973			
##						

##
##
Parameter Estimates

## ##	Parameter Estimates								
## ## ##	model	Beta	Std. Error	Std. Beta	t	Sig			
##	(Intercept)	1.509	0.007		223.644	0.000			
##	size1_descr32.0 MLOZ	0.302	0.008	0.248	37.323	0.000			
##	couponper1	0.050	0.002	0.167	25.034	0.000			
##	haspromoTRUE	-0.043	0.002	-0.134	-19.786	0.000			
##	${\tt regionCentral}$	-0.026	0.003	-0.069	-8.496	0.000			
##	${\tt regionSouth}$	-0.031	0.003	-0.091	-10.747	0.000			
##	regionWest	-0.018	0.003	-0.052	-6.282	0.000			
##	flavor_descrAMERICONE DREAM	-0.029	0.008	-0.037	-3.576	0.000			

##	flavor_descrBANANA SPLIT	-0.047	0.009	-0.049	-5.314	0.000
##	flavor_descrBLACK & TAN	-0.095	0.030	-0.020	-3.135	0.002
##	flavor_descrBROWNIE BATTER	-0.007	0.014	-0.004	-0.495	0.620
##	flavor_descrBUTTER PECAN	-0.010	0.012	-0.007	-0.890	0.373
##	flavor_descrCAKE BATTER	-0.045	0.010	-0.038	-4.559	0.000
##	flavor_descrCHC	-0.002	0.016	-0.001	-0.093	0.926
##	flavor_descrCHC ALMOND NOUGAT	-0.019	0.015	-0.009	-1.258	0.208
##	flavor_descrCHC CHIP C-DH	-0.028	0.008	-0.039	-3.555	0.000
##	flavor_descrCHC FUDGE BROWNIE	-0.032	0.008	-0.048	-4.182	0.000
##	flavor_descrCHERRY GRCA	-0.034	0.007	-0.063	-4.618	0.000
##	flavor_descrCHUBBY HUBBY	-0.013	0.011	-0.010	-1.213	0.225
##	flavor_descrCHUNKY MONKEY	-0.039	0.008	-0.053	-4.869	0.000
##	flavor_descrCINNAMON BUNS	-0.051	0.009	-0.054	-5.794	0.000
##	flavor_descrCOFFEE	0.028	0.021	0.009	1.348	0.178
##	flavor_descrCREME BRULEE	-0.053	0.009	-0.048	-5.590	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	0.019	0.148	0.001	0.130	0.896
##	flavor_descrDUBLIN MUDSLIDE	-0.018	0.010	-0.015	-1.806	0.071
##	flavor_descrFOSSIL FUEL	-0.047	0.017	-0.019	-2.717	0.007
##	flavor_descrHALF BAKED	-0.040	0.009	-0.045	-4.661	0.000
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.039	0.009	-0.039	-4.305	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.024	0.008	-0.033	-3.030	0.002
##	flavor_descrHEATH CRUNCH	-0.002	0.009	-0.002	-0.267	0.789
##	flavor_descrIMAGINE WHIRLED PEACE	-0.045	0.009	-0.048	-5.152	0.000
##	flavor_descrKARAMEL SUTRA	-0.034	0.008	-0.040	-4.059	0.000
##	flavor_descrMAGIC BROWNIES	-0.044	0.012	-0.027	-3.572	0.000
##	flavor_descrMINT CHC CHUNK	0.012	0.014	0.006	0.850	0.395
##	flavor_descrNEAPOLITAN DYNAMITE	-0.024	0.013	-0.014	-1.896	0.058
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.036	0.008	-0.046	-4.438	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.024	0.013	-0.014	-1.924	0.054
##	flavor_descrONE CSK BROWNIE	-0.062	0.009	-0.062	-6.884	0.000
##	flavor_descrOXFORD MINT CHC COOKIE	-0.028	0.010	-0.021	-2.643	0.008
##	flavor_descrPB CUP	-0.031	0.008	-0.038	-3.777	0.000
##	flavor_descrPB TRUFFLE	-0.092	0.148	-0.004	-0.620	0.535
##	flavor_descrPHISH FOOD	-0.024	0.008	-0.032	-3.002	0.003
##	flavor_descrPISTACHIO PISTACHIO	-0.028	0.009	-0.032	-3.325	0.001
##	flavor_descrPUMPKIN CSK	-0.107	0.014	-0.055	-7.695	0.000
##	flavor_descrRSP CHC CHUNK	-0.002	0.018	-0.001	-0.085	0.932
##	flavor_descrSMORES	0.009	0.012	0.005	0.735	0.462
##	flavor_descrSTR	0.048	0.045	0.007	1.064	0.287
##	flavor_descrSTR CSK	-0.049	0.009	-0.047	-5.318	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.022	0.041	-0.003	-0.519	0.603
##	flavor_descrSWEET CREAM & COOKIES	0.032	0.036	0.006	0.887	0.375
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.033	0.017	-0.013	-1.953	0.051
##	flavor_descrTURTLE SOUP	-0.055	0.012	-0.033	-4.475	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.037	0.011	-0.027	-3.457	0.001
##	flavor_descrVERMONTY PYTHON	-0.023	0.014	-0.011	-1.576	0.115
##	flavor_descrW-N-C-P-C	-0.038	0.009	-0.042	-4.411	0.000
##	flavor_descrWHITE RUSSIAN	0.164	0.148	0.007	1.112	0.266
##						

Stepwise Selection: Step 6

##

##

- usecoup added ## Model Summary ## 0.345 RMSE 0.119 Coef. Var ## R 0.147 ## R-Squared 10.147 ## Adj. R-Squared 0.117 MSE 0.022 -Inf## Pred R-Squared MAE0.111 ______ ## RMSE: Root Mean Square Error ## MSE: Mean Square Error ## MAE: Mean Absolute Error ## ANOVA ## Sum of Squares DF Mean Square F Sig. ## -----._____ 56 0.0000 ## Regression 64.023 1.143 52.812 21917 ## Residual 474.459 0.022 ## Total 538.482 21973 ## Parameter Estimates ______ model Beta Std. Error Std. Beta Sig 0.000 1.510 0.007 224.255 (Intercept) ## size1_descr32.0 MLOZ 0.304 0.008 0.249 37.622 0.000 ## 0.068 0.003 0.226 25.388 0.000 couponper1 ## haspromoTRUE -0.036 0.002 -0.112-15.8360.000 ## regionCentral -0.027 0.003 -0.071 -8.707 0.000 ## regionSouth -0.031 0.003 -0.092 -10.930 0.000 ## -0.019 regionWest 0.003 -0.052 -6.350 0.000 -3.707 ## flavor_descrAMERICONE DREAM -0.030 0.008 -0.038 0.000 ## flavor_descrBANANA SPLIT -0.0470.009 -0.049-5.285 0.000 ## flavor descrBLACK & TAN -0.096 0.030 -0.021 -3.1700.002 ## flavor_descrBROWNIE BATTER -0.008 0.014 -0.004 -0.597 0.551 ## flavor_descrBUTTER PECAN -0.011 0.011 -0.007 -0.926 0.355 ## flavor_descrCAKE BATTER -0.045 0.010 -0.039 -4.5750.000 ## flavor descrCHC 0.000 0.016 0.000 0.024 0.980 ## flavor descrCHC ALMOND NOUGAT -0.017-0.008 -1.1450.252 0.015 flavor descrCHC CHIP C-DH -3.649 ## -0.029 0.008 -0.040 0.000 ## flavor_descrCHC FUDGE BROWNIE -0.032 -0.048 0.000 0.008 -4.186 ## flavor_descrCHERRY GRCA -0.035 0.007 -0.065 -4.7530.000 ## flavor_descrCHUBBY HUBBY -0.014 -0.010 -1.301 0.011 0.193 -0.054 -4.996 ## flavor_descrCHUNKY MONKEY -0.040 0.008 0.000 ## flavor_descrCINNAMON BUNS -0.0510.009 -0.054-5.823 0.000 ## flavor_descrCOFFEE 0.027 0.021 0.009 1.317 0.188

-0.053

0.019

-0.018

-0.049

-0.041

0.009

0.147

0.010

0.017

0.009

-0.048

0.001

-0.015

-0.019

-0.046

-5.602

0.129

-1.821

-2.813

-4.784

0.000

0.897

0.069

0.005

0.000

flavor_descrCREME BRULEE

flavor_descrFOSSIL FUEL

flavor descrHALF BAKED

flavor_descrDUBLIN MUDSLIDE

flavor_descrDOUBLE CHC FUDGE SWR

##

##

##

##

##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.039	0.009	-0.038	-4.292	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.024	0.008	-0.033	-3.014	0.003
##	flavor_descrHEATH CRUNCH	-0.003	0.009	-0.003	-0.375	0.708
##	flavor_descrIMAGINE WHIRLED PEACE	-0.045	0.009	-0.048	-5.164	0.000
##	flavor_descrKARAMEL SUTRA	-0.036	0.008	-0.041	-4.234	0.000
##	flavor_descrMAGIC BROWNIES	-0.045	0.012	-0.027	-3.683	0.000
##	flavor_descrMINT CHC CHUNK	0.011	0.014	0.006	0.811	0.417
##	flavor_descrNEAPOLITAN DYNAMITE	-0.025	0.012	-0.015	-2.037	0.042
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.037	0.008	-0.048	-4.625	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.024	0.013	-0.014	-1.917	0.055
##	flavor_descrONE CSK BROWNIE	-0.062	0.009	-0.063	-6.931	0.000
##	flavor_descrOXFORD MINT CHC COOKIE	-0.029	0.010	-0.022	-2.738	0.006
##	flavor_descrPB CUP	-0.032	0.008	-0.039	-3.841	0.000
##	flavor_descrPB TRUFFLE	-0.092	0.147	-0.004	-0.623	0.533
##	flavor_descrPHISH FOOD	-0.025	0.008	-0.032	-3.067	0.002
##	flavor_descrPISTACHIO PISTACHIO	-0.028	0.008	-0.032	-3.344	0.001
##	flavor_descrPUMPKIN CSK	-0.109	0.014	-0.056	-7.797	0.000
##	flavor_descrRSP CHC CHUNK	0.000	0.018	0.000	-0.015	0.988
##	flavor_descrSMORES	0.008	0.012	0.005	0.637	0.524
##	flavor_descrSTR	0.051	0.045	0.007	1.136	0.256
##	flavor_descrSTR CSK	-0.049	0.009	-0.047	-5.339	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.022	0.041	-0.003	-0.541	0.588
##	flavor_descrSWEET CREAM & COOKIES	0.033	0.036	0.006	0.910	0.363
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.034	0.017	-0.014	-2.006	0.045
##	flavor_descrTURTLE SOUP	-0.055	0.012	-0.034	-4.514	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.038	0.011	-0.028	-3.545	0.000
##	flavor_descrVERMONTY PYTHON	-0.023	0.014	-0.011	-1.603	0.109
##	flavor_descrW-N-C-P-C	-0.038	0.009	-0.043	-4.457	0.000
##	flavor_descrWHITE RUSSIAN	0.164	0.147	0.007	1.113	0.266
##	usecoupTRUE	-0.048	0.005	-0.094	-10.040	0.000
##						

##

##

##

Model Summary

$\pi\pi$				
##	R	0.345	RMSE	0.147
##	R-Squared	0.119	Coef. Var	10.147
##	Adj. R-Squared	0.117	MSE	0.022
##	Pred R-Squared	-Inf	MAE	0.111

RMSE: Root Mean Square Error ## MSE: Mean Square Error ## MAE: Mean Absolute Error

ANOVA

##						
##		Sum of				
##		Squares	DF	Mean Square	F	Sig.
##						
##	Regression	64.023	56	1.143	52.812	0.0000
##	Residual	474.459	21917	0.022		
##	Total	538.482	21973			
##						

##		-				
##		Para	meter Estimate	S		
## ##	model	Beta	Std. Error	Std. Beta	t	Sig
##	model					Sig
##	(Intercept)	1.510	0.007		224.255	0.000
##	size1_descr32.0 MLOZ	0.304	0.008	0.249	37.622	0.000
##	couponper1	0.068	0.003	0.226	25.388	0.000
##	haspromoTRUE	-0.036	0.002	-0.112	-15.836	0.000
##	regionCentral	-0.027	0.003	-0.071	-8.707	0.000
##	regionSouth	-0.031	0.003	-0.092	-10.930	0.000
##	regionWest	-0.019	0.003	-0.052	-6.350	0.000
##	flavor_descrAMERICONE DREAM	-0.030	0.008	-0.038	-3.707	0.000
##	flavor_descrBANANA SPLIT	-0.047	0.009	-0.049	-5.285	0.000
##	flavor_descrBLACK & TAN	-0.096	0.030	-0.021	-3.170	0.002
##	flavor_descrBROWNIE BATTER	-0.008	0.014	-0.004	-0.597	0.551
##	flavor_descrBUTTER PECAN	-0.011	0.011	-0.007	-0.926	0.355
##	flavor_descrCAKE BATTER	-0.045	0.010	-0.039	-4.575	0.000
##	flavor_descrCHC	0.000	0.016	0.000	0.024	0.980
##	flavor_descrCHC ALMOND NOUGAT	-0.017	0.015	-0.008	-1.145	0.252
##	flavor_descrCHC CHIP C-DH	-0.029	0.008	-0.040	-3.649	0.000
##	flavor_descrCHC	-0.032	0.008	-0.048	-4.186	0.000
##	flavor_descrCHERRY GRCA	-0.035	0.007	-0.065	-4.753	0.000
##	flavor_descrCHUBBY HUBBY	-0.014	0.011	-0.010	-1.301	0.193
##	flavor_descrCHUNKY MONKEY	-0.040	0.008	-0.054	-4.996	0.000
##	flavor_descrCINNAMON BUNS	-0.051	0.009	-0.054	-5.823	0.000
##	flavor_descrCOFFEE	0.027	0.021	0.009	1.317	0.188
##	flavor_descrCREME BRULEE	-0.053	0.009	-0.048	-5.602	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	0.019	0.147	0.001	0.129	0.897
##	flavor_descrDUBLIN MUDSLIDE	-0.018	0.010	-0.015	-1.821	0.069
##	flavor_descrFOSSIL FUEL	-0.049	0.017	-0.019	-2.813	0.005
##	flavor_descrHALF BAKED	-0.041	0.009	-0.046	-4.784	0.000
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.039	0.009	-0.038	-4.292	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.024	0.008	-0.033	-3.014	0.003
##	flavor_descrHEATH CRUNCH	-0.003	0.009	-0.003	-0.375	0.708
##	flavor_descrIMAGINE WHIRLED PEACE	-0.045	0.009	-0.048	-5.164	0.000
##	flavor_descrKARAMEL SUTRA	-0.036	0.008	-0.041	-4.234	0.000
##	flavor_descrMAGIC BROWNIES	-0.045	0.012	-0.027	-3.683	0.000
##	flavor_descrMINT CHC CHUNK	0.011	0.014	0.006	0.811	0.417
##	flavor_descrNEAPOLITAN DYNAMITE	-0.025	0.012	-0.015	-2.037	0.042
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.037	0.008	-0.048	-4.625	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.024	0.013	-0.014	-1.917	0.055
##	flavor_descrONE CSK BROWNIE	-0.062	0.009	-0.063	-6.931	0.000
##	flavor_descrOXFORD MINT CHC COOKIE	-0.029	0.010	-0.022	-2.738	0.006
##	flavor_descrPB CUP	-0.032	0.008	-0.039	-3.841	0.000
##	flavor_descrPB TRUFFLE	-0.092	0.147	-0.004	-0.623	0.533
##	flavor_descrPHISH FOOD	-0.025	0.008	-0.032	-3.067	0.002
##	flavor_descrPISTACHIO PISTACHIO	-0.028	0.008	-0.032	-3.344	0.001
##	flavor_descrPUMPKIN CSK	-0.109	0.014	-0.056	-7.797	0.000
##	flavor_descrRSP CHC CHUNK	0.000	0.018	0.000	-0.015	0.988
##	flavor_descrSMORES	0.008	0.012	0.005	0.637	0.524
##	flavor_descrSTR	0.051	0.045	0.007	1.136	0.256
##	flavor_descrSTR CSK	-0.049	0.009	-0.047	-5.339	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.022	0.041	-0.003	-0.541	0.588

##	flavor_descrSWEET CREAM & COOKIES	0.033	0.036	0.006	0.910	0.363
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.034	0.017	-0.014	-2.006	0.045
##	flavor_descrTURTLE SOUP	-0.055	0.012	-0.034	-4.514	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.038	0.011	-0.028	-3.545	0.000
##	flavor_descrVERMONTY PYTHON	-0.023	0.014	-0.011	-1.603	0.109
##	flavor_descrW-N-C-P-C	-0.038	0.009	-0.043	-4.457	0.000
##	flavor_descrWHITE RUSSIAN	0.164	0.147	0.007	1.113	0.266
##	usecoupTRUE	-0.048	0.005	-0.094	-10.040	0.000
##						
##						
##						
##						
##	Stanwige Selection: Stan 7					

Stepwise Selection: Step 7

- household_composition added

Model Summary

			J	
##				
##	R	0.349	RMSE	0.147
##	R-Squared	0.122	Coef. Var	10.131
##	Adj. R-Squared	0.119	MSE	0.022
##	Pred R-Squared	-Inf	MAE	0.111
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RMSE: Root Mean Square Error
MSE: Mean Square Error

MAE: Mean Absolute Error

ANOVA

##					
##	Sum of				
##	Squares	DF	Mean Square	F	Sig.
##					
## Regression	65.665	62	1.059	49.08	0.0000
## Residual	472.817	21911	0.022		
## Total	538.482	21973			

##

##

##

Parameter Estimates

##						
##	model	Beta	Std. Error	Std. Beta	t	Sig
##	(* · · · · · · · · · · · · · · · · · · ·					
##	(Intercept)	1.503	0.007		221.498	0.000
##	size1_descr32.0 MLOZ	0.304	0.008	0.250	37.746	0.000
##	couponper1	0.068	0.003	0.225	25.230	0.000
##	haspromoTRUE	-0.036	0.002	-0.113	-15.850	0.000
##	regionCentral	-0.027	0.003	-0.072	-8.826	0.000
##	regionSouth	-0.032	0.003	-0.094	-11.080	0.000
##	regionWest	-0.020	0.003	-0.057	-6.860	0.000
##	flavor_descrAMERICONE DREAM	-0.029	0.008	-0.035	-3.484	0.000
##	flavor_descrBANANA SPLIT	-0.047	0.009	-0.048	-5.259	0.000
##	flavor_descrBLACK & TAN	-0.092	0.030	-0.020	-3.059	0.002
##	flavor_descrBROWNIE BATTER	-0.005	0.014	-0.003	-0.386	0.700
##	flavor_descrBUTTER PECAN	-0.012	0.011	-0.008	-1.014	0.310
##	flavor_descrCAKE BATTER	-0.043	0.010	-0.037	-4.400	0.000

##	flavor_descrCHC	-0.002	0.016	-0.001	-0.120	0.905
##	flavor_descrCHC ALMOND NOUGAT	-0.016	0.015	-0.007	-1.062	0.288
##	flavor_descrCHC CHIP C-DH	-0.026	0.008	-0.035	-3.250	0.001
##	flavor_descrCHC FUDGE BROWNIE	-0.030	0.008	-0.045	-3.925	0.000
##	flavor_descrCHERRY GRCA	-0.033	0.007	-0.063	-4.597	0.000
##	flavor_descrCHUBBY HUBBY	-0.013	0.010	-0.010	-1.244	0.214
##	flavor_descrCHUNKY MONKEY	-0.037	0.008	-0.051	-4.711	0.000
##	flavor_descrCINNAMON BUNS	-0.050	0.009	-0.052	-5.637	0.000
##	flavor_descrCOFFEE	0.025	0.021	0.008	1.229	0.219
##	flavor_descrCREME BRULEE	-0.051	0.009	-0.046	-5.382	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	0.014	0.147	0.001	0.093	0.926
##	flavor_descrDUBLIN MUDSLIDE	-0.015	0.010	-0.013	-1.543	0.123
##	flavor_descrFOSSIL FUEL	-0.047	0.017	-0.019	-2.720	0.007
##	flavor_descrHALF BAKED	-0.038	0.009	-0.043	-4.482	0.000
	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.036	0.009	-0.035	-3.975	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.022	0.008	-0.030	-2.756	0.006
##	flavor_descrHEATH CRUNCH	-0.002	0.009	-0.002	-0.198	0.843
##	flavor_descrIMAGINE WHIRLED PEACE	-0.043	0.009	-0.046	-4.929	0.000
##	flavor_descrKARAMEL SUTRA	-0.034	0.008	-0.040	-4.078	0.000
##	flavor_descrMAGIC BROWNIES	-0.045	0.012	-0.027	-3.650	0.000
##	flavor_descrMINT CHC CHUNK	0.014	0.014	0.007	0.997	0.319
##	flavor_descrNEAPOLITAN DYNAMITE	-0.025	0.012	-0.015	-1.967	0.049
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.036	0.008	-0.046	-4.408	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.021	0.013	-0.012	-1.665	0.096
##	flavor_descrONE CSK BROWNIE	-0.060	0.009	-0.060	-6.682	0.000
##	flavor_descrOXFORD MINT CHC COOKIE	-0.025	0.010	-0.020	-2.443	0.015
##	flavor_descrPB CUP	-0.030	0.008	-0.036	-3.574	0.000
##	flavor_descrPB TRUFFLE	-0.082	0.147	-0.004	-0.559	0.576
##	flavor_descrPHISH FOOD	-0.022	0.008	-0.028	-2.707	0.007
##	flavor_descrPISTACHIO PISTACHIO	-0.026	0.008	-0.029	-3.036	0.002
##	flavor_descrPUMPKIN CSK	-0.106	0.014	-0.055	-7.640	0.000
##	flavor_descrRSP CHC CHUNK	-0.001	0.018	-0.001	-0.079	0.937
##	flavor_descrSMORES	0.011	0.012	0.007	0.894	0.371
##	flavor_descrSTR	0.053	0.045	0.008	1.185	0.236
##	flavor_descrSTR CSK	-0.046	0.009	-0.045	-5.021	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.018	0.041	-0.003	-0.433	0.665
##	flavor_descrSWEET CREAM & COOKIES	0.034	0.036	0.006	0.941	0.347
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.035	0.017	-0.014	-2.025	0.043
##	flavor_descrTURTLE SOUP	-0.052	0.012	-0.032	-4.265	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.037	0.011	-0.027	-3.414	0.001
##	flavor_descrVERMONTY PYTHON	-0.021	0.014	-0.011	-1.499	0.134
##	flavor_descrW-N-C-P-C	-0.038	0.009	-0.042	-4.414	0.000
##	flavor_descrWHITE RUSSIAN	0.171	0.147	0.007	1.160	0.246
##	usecoupTRUE	-0.047	0.005	-0.094	-9.989	0.000
##	household_composition2	-0.003	0.004	-0.005	-0.770	0.441
##	household_composition3	0.018	0.005	0.022	3.431	0.001
##	household_composition5	0.012	0.003	0.028	4.256	0.000
##	household_composition6	-0.009	0.014	-0.004	-0.692	0.489
##	household_composition7	0.027	0.004	0.045	6.956	0.000
##	household_composition8	0.016	0.005	0.020	3.152	0.002
##						

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##

##		Model Summa	CIT						
##		Model Summa.	- y 			_			
##	R	0.349	RMSE		0.147				
##	R-Squared	0.122	Coef. Y	Var	10.131				
	Adj. R-Squared	0.119	MSE		0.022				
##	Pred R-Squared	-Inf	MAE		0.111				
##						_			
##	RMSE: Root Mean Squa								
##	MSE: Mean Square Err								
##	MAE: Mean Absolute E	irror							
##		ANO	7Δ						
##			· · · · · · · · · · · · · · · · · · ·				_		
##	Sum of	•							
##	Squares	DF	Mean	Square	F	Sig.			
##							_		
	Regression 65.665			1.059	49.08	0.0000			
	Residual 472.817			0.022					
	Total 538.482								
##							_		
##				Par	ameter E	stimates			
##									
##			model	Beta	Std.	Error	Std. Beta	t	Sig
##									
##		(Inte	ercept)	1.503		0.007		221.498	0.000
##		size1_descr32				0.008	0.250	37.746	0.000
##		_	ponper1			0.003	0.225	25.230	0.000
##		-	omoTRUE			0.002	-0.113	-15.850	0.000
##		_	Central			0.003	-0.072	-8.826	0.000
## ##		•	onSouth ionWest	-0.032 -0.020		0.003 0.003	-0.094 -0.057	-11.080 -6.860	0.000
##	flavor	descrAMERICONI				0.003	-0.035	-3.484	0.000
##		vor_descrBANAN				0.009	-0.048	-5.259	0.000
##		_avor_descrBLAC		-0.092		0.030	-0.020	-3.059	0.002
##	flavo	or_descrBROWNIE	BATTER			0.014	-0.003	-0.386	0.700
##	fla	vor_descrBUTTE	R PECAN	-0.012		0.011	-0.008	-1.014	0.310
##	fl	.avor_descrCAKE		-0.043		0.010	-0.037	-4.400	0.000
##		flavor_de		-0.002		0.016	-0.001	-0.120	0.905
##	_	lescrCHC ALMOND		-0.016		0.015	-0.007	-1.062	0.288
##		ror_descrCHC CH		-0.026		0.008	-0.035	-3.250	0.001
## ##	_	lescrCHC FUDGE		-0.030 -0.033		0.008 0.007	-0.045 -0.063	-3.925 -4.597	0.000
##		wor_descrCHUBB		-0.013		0.007	-0.010	-1.244	0.000
##		or_descrCHUNKY		-0.037		0.008	-0.051	-4.711	0.000
##		or_descrCINNAM		-0.050		0.009	-0.052	-5.637	0.000
##		flavor_desc		0.025		0.021	0.008	1.229	0.219
##		vor_descrCREME		-0.051		0.009	-0.046	-5.382	0.000
##	_	rDOUBLE CHC FU		0.014		0.147	0.001	0.093	0.926
##		_descrDUBLIN M		-0.015		0.010	-0.013	-1.543	0.123
##		avor_descrFOSS		-0.047		0.017	-0.019	-2.720	0.007
##		lavor_descrHAL		-0.038 -0.036		0.009	-0.043 -0.035	-4.482 -3.075	0.000
##	flavor_descrHEATH CAN	crHEATH COFFEE		-0.036 -0.022		0.009 0.008	-0.035 -0.030	-3.975 -2.756	0.000
##	rravor_des	CIHEMIN CUFFEE	OHONOR	0.022	,	0.000	0.030	2.100	0.000

##	flavor_descrHEATH CRUNCH	-0.002	0.009	-0.002	-0.198	0.843
##	flavor_descrIMAGINE WHIRLED PEACE	-0.043	0.009	-0.046	-4.929	0.000
##	flavor_descrKARAMEL SUTRA	-0.034	0.008	-0.040	-4.078	0.000
##	flavor_descrMAGIC BROWNIES	-0.045	0.012	-0.027	-3.650	0.000
##	flavor_descrMINT CHC CHUNK	0.014	0.014	0.007	0.997	0.319
##	flavor_descrNEAPOLITAN DYNAMITE	-0.025	0.012	-0.015	-1.967	0.049
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.036	0.008	-0.046	-4.408	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.021	0.013	-0.012	-1.665	0.096
##	flavor_descrONE CSK BROWNIE	-0.060	0.009	-0.060	-6.682	0.000
##	<pre>flavor_descrOXFORD MINT CHC COOKIE</pre>	-0.025	0.010	-0.020	-2.443	0.015
##	flavor_descrPB CUP	-0.030	0.008	-0.036	-3.574	0.000
##	flavor_descrPB TRUFFLE	-0.082	0.147	-0.004	-0.559	0.576
##	flavor_descrPHISH FOOD	-0.022	0.008	-0.028	-2.707	0.007
##	flavor_descrPISTACHIO PISTACHIO	-0.026	0.008	-0.029	-3.036	0.002
##	flavor_descrPUMPKIN CSK	-0.106	0.014	-0.055	-7.640	0.000
##	flavor_descrRSP CHC CHUNK	-0.001	0.018	-0.001	-0.079	0.937
##	flavor_descrSMORES	0.011	0.012	0.007	0.894	0.371
##	flavor_descrSTR	0.053	0.045	0.008	1.185	0.236
##	flavor_descrSTR CSK	-0.046	0.009	-0.045	-5.021	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.018	0.041	-0.003	-0.433	0.665
##	flavor_descrSWEET CREAM & COOKIES	0.034	0.036	0.006	0.941	0.347
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.035	0.017	-0.014	-2.025	0.043
##	flavor_descrTURTLE SOUP	-0.052	0.012	-0.032	-4.265	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.037	0.011	-0.027	-3.414	0.001
##	flavor_descrVERMONTY PYTHON	-0.021	0.014	-0.011	-1.499	0.134
##	flavor_descrW-N-C-P-C	-0.038	0.009	-0.042	-4.414	0.000
##	flavor_descrWHITE RUSSIAN	0.171	0.147	0.007	1.160	0.246
##	usecoupTRUE	-0.047	0.005	-0.094	-9.989	0.000
##	household_composition2	-0.003	0.004	-0.005	-0.770	0.441
##	household_composition3	0.018	0.005	0.022	3.431	0.001
##	household_composition5	0.012	0.003	0.028	4.256	0.000
##	household_composition6	-0.009	0.014	-0.004	-0.692	0.489
##	household_composition7	0.027	0.004	0.045	6.956	0.000
##	household_composition8	0.016	0.005	0.020	3.152	0.002
##						

##

Stepwise Selection: Step 8

##
- household_income added

##

##		ary		
##				
##	R	0.355	RMSE	0.147
##	R-Squared	0.126	Coef. Var	10.108
##	Adj. R-Squared	0.123	MSE	0.021
##	Pred R-Squared	-Inf	MAE	0.110

RMSE: Root Mean Square Error
MSE: Mean Square Error
MAE: Mean Absolute Error

##

ANOVA

##								_		
##		Sum of								
##		Squares	DF	Mean	Square	F	Sig.			
##								-		
##	Regression	67.833	63		1.077	50.124	0.0000			
	Residual	470.649	21910		0.021					
##	Total	538.482	21973							
##								-		
##										
##					Pa	rameter	Estimates			
##					D-+-	C+3	E	Ctd Data		C:
## ##				model	Beta 		Error	Std. Beta	t 	Sig
##			(Inte	rcept)	1.457		0.008		177.400	0.000
##		si	ze1_descr32.	-	0.302		0.008	0.248	37.488	0.000
##		51	_	onper1	0.068		0.003	0.225	25.343	0.000
##			haspro	-	-0.036		0.002	-0.114	-16.121	0.000
##			regionC		-0.026		0.003	-0.070	-8.572	0.000
##			_	nSouth	-0.032		0.003	-0.093	-11.006	0.000
##			•	onWest	-0.021		0.003	-0.058	-7.012	0.000
##		flavor de	scrAMERICONE		-0.028		0.008	-0.034	-3.393	0.001
##		_	_descrBANANA		-0.045		0.009	-0.047	-5.128	0.000
##		flavo	r_descrBLACK	& TAN	-0.087		0.030	-0.019	-2.882	0.004
##		flavor_d	lescrBROWNIE	BATTER	-0.004		0.014	-0.002	-0.271	0.786
##		flavor	_descrBUTTER	PECAN	-0.011		0.011	-0.007	-0.945	0.344
##		flavo	r_descrCAKE	BATTER	-0.042		0.010	-0.036	-4.288	0.000
##			flavor_de	scrCHC	-0.004		0.016	-0.002	-0.263	0.792
##		_	rCHC ALMOND		-0.015		0.015	-0.007	-0.991	0.322
##			descrCHC CHI		-0.025		0.008	-0.034	-3.170	0.002
##		_	rCHC FUDGE B		-0.027		0.008	-0.039	-3.442	0.001
##			r_descrCHERR		-0.031		0.007	-0.059	-4.322	0.000
##			_descrCHUBBY		-0.011		0.010	-0.009	-1.095	0.273
##		_	descrCHUNKY		-0.037		0.008	-0.050	-4.656	0.000
##		_	descrCINNAMO		-0.048		0.009	-0.050	-5.428	0.000
##			flavor_descr		0.027		0.021	0.009	1.318	0.188
##			_descrCREME		-0.048		0.009	-0.044	-5.071	0.000
##	I.	lavor_descrDO			-0.002		0.147	0.000	-0.012	0.991
##		_	escrDUBLIN MU or_descrFOSSI		-0.012		0.010	-0.010	-1.186	0.236
## ##			_		-0.048		0.017	-0.019	-2.769	0.006
##	flavor dogg	rHEATH CANDY	or_descrHALF		-0.037		0.009	-0.041 -0.034	-4.306 -3.774	0.000
##	_	flavor_descrH			-0.034 -0.021		0.009 0.008	-0.034 -0.029	-3.774 -2.640	0.000
##		_	_descrHEATH		-0.021		0.008	-0.029	-0.212	0.832
##	f1	avor_descrIMA	_		-0.042		0.009	-0.044	-4.728	0.000
##	1,1,		descrKARAMEL		-0.032		0.003	-0.037	-3.815	0.000
##			lescrMAGIC BR		-0.043		0.012	-0.026	-3.483	0.000
##		_	lescrMINT CHC		0.013		0.012	0.007	0.964	0.335
##		flavor_descrN			-0.023		0.012	-0.014	-1.866	0.062
##		descrNEW YORK			-0.033		0.008	-0.043	-4.145	0.000
##	_	lavor_descrOA			-0.021		0.013	-0.012	-1.635	0.102
##		_	escrONE CSK B		-0.057		0.009	-0.058	-6.381	0.000
##	fla	vor_descr0XF0			-0.025		0.010	-0.019	-2.406	0.016
шш		_		מנום	0 000		0 000	0 024	2 277	0 001

-0.028

-0.079

0.008

0.147

-0.034

-0.003

-3.377

-0.537

0.001

0.591

flavor_descrPB CUP

flavor_descrPB TRUFFLE

##

##	flavor_descrPHISH FOOD	-0.021	0.008	-0.027	-2.586	0.010
##	flavor_descrPISTACHIO PISTACHIO	-0.026	0.008	-0.030	-3.096	0.002
##	flavor_descrPUMPKIN CSK	-0.101	0.014	-0.052	-7.282	0.000
##	flavor_descrRSP CHC CHUNK	0.001	0.018	0.000	0.060	0.952
##	flavor_descrSMORES	0.012	0.012	0.007	0.952	0.341
##	flavor_descrSTR	0.055	0.045	0.008	1.236	0.216
##	flavor_descrSTR CSK	-0.043	0.009	-0.041	-4.642	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.019	0.041	-0.003	-0.463	0.643
##	flavor_descrSWEET CREAM & COOKIES	0.033	0.036	0.006	0.914	0.361
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.033	0.017	-0.013	-1.924	0.054
##	flavor_descrTURTLE SOUP	-0.051	0.012	-0.032	-4.234	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.036	0.011	-0.026	-3.329	0.001
##	flavor_descrVERMONTY PYTHON	-0.022	0.014	-0.011	-1.528	0.127
##	flavor_descrW-N-C-P-C	-0.034	0.009	-0.038	-3.978	0.000
##	flavor_descrWHITE RUSSIAN	0.183	0.147	0.008	1.250	0.211
##	usecoupTRUE	-0.047	0.005	-0.093	-9.983	0.000
##	household_composition2	0.007	0.004	0.012	1.787	0.074
##	household_composition3	0.021	0.005	0.027	4.148	0.000
##	household_composition5	0.023	0.003	0.054	7.630	0.000
##	household_composition6	-0.003	0.014	-0.001	-0.196	0.845
##	${\tt household_composition7}$	0.036	0.004	0.061	9.118	0.000
##	household_composition8	0.020	0.005	0.025	3.868	0.000
##	household_income	0.002	0.000	0.071	10.047	0.000
##						
##						
##						
##						
##	Model Summary					

##				
##	R	0.355	RMSE	0.147
##	R-Squared	0.126	Coef. Var	10.108
##	Adj. R-Squared	0.123	MSE	0.021
##	Pred R-Squared	-Inf	MAE	0.110
шш				

RMSE: Root Mean Square Error ## MSE: Mean Square Error

MAE: Mean Absolute Error

##

ANOVA

##						
##		Sum of				
##		Squares	DF	Mean Square	F	Sig.
##						
##	Regression	67.833	63	1.077	50.124	0.0000
##	Residual	470.649	21910	0.021		
##	Total	538.482	21973			
##						

Parameter Estimates

##	model	Beta	Std. Error	Std. Beta	t	Sig
##						
##	(Intercept)	1.457	0.008		177.400	0.000
##	size1 descr32.0 MLOZ	0.302	0.008	0.248	37.488	0.000

##	couponper1	0.068	0.003	0.225	25.343	0.000
##	haspromoTRUE	-0.036	0.002	-0.114	-16.121	0.000
##	regionCentral	-0.026	0.003	-0.070	-8.572	0.000
##	regionSouth	-0.032	0.003	-0.093	-11.006	0.000
##	regionWest	-0.021	0.003	-0.058	-7.012	0.000
##	flavor_descrAMERICONE DREAM	-0.028	0.008	-0.034	-3.393	0.001
##	flavor_descrBANANA SPLIT	-0.045	0.009	-0.047	-5.128	0.000
##	flavor_descrBLACK & TAN	-0.087	0.030	-0.019	-2.882	0.004
##	flavor_descrBROWNIE BATTER	-0.004	0.014	-0.002	-0.271	0.786
##	flavor_descrBUTTER PECAN	-0.011	0.011	-0.007	-0.945	0.344
##	flavor_descrCAKE BATTER	-0.042	0.010	-0.036	-4.288	0.000
##	flavor_descrCHC	-0.004	0.016	-0.002	-0.263	0.792
##	flavor_descrCHC ALMOND NOUGAT	-0.015	0.015	-0.007	-0.991	0.322
##	flavor_descrCHC CHIP C-DH	-0.025	0.008	-0.034	-3.170	0.002
##	flavor_descrCHC FUDGE BROWNIE	-0.027	0.008	-0.039	-3.442	0.001
##	flavor_descrCHERRY GRCA	-0.031	0.007	-0.059	-4.322	0.000
##	flavor_descrCHUBBY HUBBY	-0.011	0.010	-0.009	-1.095	0.273
##	flavor_descrCHUNKY MONKEY	-0.037	0.008	-0.050	-4.656	0.000
##	flavor_descrCINNAMON BUNS	-0.048	0.009	-0.050	-5.428	0.000
##	flavor_descrCOFFEE	0.027	0.021	0.009	1.318	0.188
##	flavor_descrCREME BRULEE	-0.048	0.009	-0.044	-5.071	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	-0.002	0.147	0.000	-0.012	0.991
##	flavor_descrDUBLIN MUDSLIDE	-0.012	0.010	-0.010	-1.186	0.236
##	flavor_descrFOSSIL FUEL	-0.048	0.017	-0.019	-2.769	0.006
##	flavor_descrHALF BAKED	-0.037	0.009	-0.041	-4.306	0.000
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.034	0.009	-0.034	-3.774	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.021	0.008	-0.029	-2.640	0.008
##	flavor_descrHEATH CRUNCH	-0.002	0.009	-0.002	-0.212	0.832
##	flavor_descrIMAGINE WHIRLED PEACE	-0.042	0.009	-0.044	-4.728	0.000
##	flavor_descrKARAMEL SUTRA	-0.032	0.008	-0.037	-3.815	0.000
##	flavor_descrMAGIC BROWNIES	-0.043	0.012	-0.026	-3.483	0.000
##	flavor_descrMINT CHC CHUNK	0.013	0.014	0.007	0.964	0.335
##	flavor_descrNEAPOLITAN DYNAMITE	-0.023	0.012	-0.014	-1.866	0.062
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.033	0.008	-0.043	-4.145	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.021	0.013	-0.012	-1.635	0.102
##	flavor_descrONE CSK BROWNIE	-0.057	0.009	-0.058	-6.381	0.000
##	<pre>flavor_descrOXFORD MINT CHC COOKIE</pre>	-0.025	0.010	-0.019	-2.406	0.016
##	flavor_descrPB CUP	-0.028	0.008	-0.034	-3.377	0.001
##	flavor_descrPB TRUFFLE	-0.079	0.147	-0.003	-0.537	0.591
##	flavor_descrPHISH FOOD	-0.021	0.008	-0.027	-2.586	0.010
##	flavor_descrPISTACHIO PISTACHIO	-0.026	0.008	-0.030	-3.096	0.002
##	flavor_descrPUMPKIN CSK	-0.101	0.014	-0.052	-7.282	0.000
##	flavor_descrRSP CHC CHUNK	0.001	0.018	0.000	0.060	0.952
##	flavor_descrSMORES	0.012	0.012	0.007	0.952	0.341
##	flavor_descrSTR	0.055	0.045	0.008	1.236	0.216
##	flavor_descrSTR CSK	-0.043	0.009	-0.041	-4.642	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.019	0.041	-0.003	-0.463	0.643
##	flavor_descrSWEET CREAM & COOKIES	0.033	0.036	0.006	0.914	0.361
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.033	0.017	-0.013	-1.924	0.054
##	flavor_descrTURTLE SOUP	-0.051	0.012	-0.032	-4.234	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.036	0.011	-0.026	-3.329	0.001
##	flavor_descrVERMONTY PYTHON	-0.022	0.014	-0.011	-1.528	0.127
##	flavor_descrW-N-C-P-C	-0.034	0.009	-0.038	-3.978	0.000
##	flavor_descrWHITE RUSSIAN	0.183	0.147	0.008	1.250	0.211

##			used	coupTRUE	-0.047	(0.005	-0.093	-9.983	0.000
##		h	ousehold_compo	osition2	0.007	(0.004	0.012	1.787	0.074
##	# household_composition3		0.021	(0.005	0.027	4.148	0.000		
##	household_composition5		0.023	(0.003	0.054	7.630	0.000		
##		h	ousehold_compo	osition6	-0.003	(0.014	-0.001	-0.196	0.845
##		h	ousehold_compo	osition7	0.036	(0.004	0.061	9.118	0.000
##		h	ousehold_compo	osition8	0.020	(0.005	0.025	3.868	0.000
##			household	d_income	0.002	(0.000	0.071	10.047	0.000
##										
##										
##										
##										
	Stepwise Sel	ection: S	tep 9							
##										
	- microwave	added								
##										
##			Model Summa	ary						
##							_			
##			0.356	RMSE		0.146				
	R-Squared		0.127	Coef.	Var	10.102				
	Adj. R-Squar		0.124	MSE		0.021				
	Pred R-Squar		-Inf	MAE		0.110				
## ## ## ##	MSE: Mean S MAE: Mean A	_		OVA						
##								_		
##		Sum of								
##		Squares	DF	Mean	Square	F	Sig.			
##						40 55		_		
	Regression				1.068	49.774	0.0000			
	Residual				0.021					
##	Total	538.482	21973					_		
##										
##					D ₀	rameter E	etimatos			
##										
##				model	Beta	Std. 1	Error	Std. Beta	t	Sig
##					ص					 D±8
##			(Tni	tercept)	1.490	(0.011		139.528	0.000
##			size1_descr32	-			0.008	0.247	37.476	0.000
##			_	ponper1	0.068		0.003	0.225	25.281	0.000
##				romoTRUE			0.002	-0.115	-16.286	0.000
##			_	nCentral			0.003	-0.068	-8.419	0.000
##				ionSouth			0.003	-0.091	-10.839	0.000
ии.			- 08-		0.001		0.000	0.001	6.000	0.000

-0.020

-0.026

-0.043

-0.084

-0.002

-0.009

-0.040

 ${\tt regionWest}$

flavor_descrAMERICONE DREAM

 ${\tt flavor_descrBANANA~SPLIT}$

flavor_descrBUTTER PECAN

flavor_descrCAKE BATTER

flavor_descrBROWNIE BATTER

flavor_descrBLACK & TAN

0.003

0.008

0.009

0.030

0.014

0.011

0.010

-0.057

-0.033

-0.045

-0.018

-0.001

-0.006

-0.035

-6.938

-3.230

-4.914

-2.812

-0.169

-0.772

-4.126

0.000

0.001

0.000

0.005

0.865

0.440

0.000

##

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##

##

##	flavor_descrCHC	-0.004	0.016	-0.002	-0.241	0.810
##	flavor_descrCHC ALMOND NOUGAT	-0.014	0.015	-0.007	-0.956	0.339
##	flavor_descrCHC CHIP C-DH	-0.024	0.008	-0.033	-2.992	0.003
##	flavor_descrCHC FUDGE BROWNIE	-0.025	0.008	-0.037	-3.291	0.001
##	flavor_descrCHERRY GRCA	-0.030	0.007	-0.056	-4.096	0.000
##	flavor_descrCHUBBY HUBBY	-0.010	0.010	-0.008	-0.960	0.337
##	flavor_descrCHUNKY MONKEY	-0.035	0.008	-0.048	-4.464	0.000
##	flavor_descrCINNAMON BUNS	-0.046	0.009	-0.049	-5.266	0.000
##	flavor_descrCOFFEE	0.030	0.021	0.010	1.438	0.150
##	flavor_descrCREME BRULEE	-0.047	0.009	-0.043	-5.016	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	0.001 -0.010	0.147 0.010	0.000 -0.008	0.004 -1.031	0.997 0.303
## ##	flavor_descrDUBLIN MUDSLIDE	-0.010 -0.047	0.017	-0.008		0.303
##	flavor_descrFOSSIL FUEL flavor_descrHALF BAKED	-0.047 -0.036	0.009	-0.019	-2.723 -4.183	0.000
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.030	0.009	-0.040	-4.163 -3.667	0.000
##	flavor_describeath CANDI EVERTITING BUT THE	-0.033	0.009	-0.033 -0.027	-2.482	0.000
##	flavor_describeATH CHATH CRUNCH	-0.001	0.009	-0.001	-0.071	0.013
##	flavor_descriMAGINE WHIRLED PEACE	-0.040	0.009	-0.042	-4.604	0.000
##	flavor_descrKARAMEL SUTRA	-0.031	0.008	-0.036	-3.660	0.000
##	flavor_descrMAGIC BROWNIES	-0.041	0.012	-0.025	-3.354	0.001
##	flavor_descrMINT CHC CHUNK	0.015	0.014	0.008	1.066	0.287
##	flavor_descrNEAPOLITAN DYNAMITE	-0.022	0.012	-0.013	-1.793	0.073
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.032	0.008	-0.041	-3.951	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.020	0.013	-0.012	-1.578	0.115
##	flavor_descrONE CSK BROWNIE	-0.056	0.009	-0.056	-6.218	0.000
##	flavor_descrOXFORD MINT CHC COOKIE	-0.024	0.010	-0.019	-2.322	0.020
##	flavor_descrPB CUP	-0.027	0.008	-0.033	-3.275	0.001
##	flavor_descrPB TRUFFLE	-0.077	0.147	-0.003	-0.528	0.598
##	flavor_descrPHISH FOOD	-0.020	0.008	-0.026	-2.464	0.014
##	flavor_descrPISTACHIO PISTACHIO	-0.025	0.008	-0.028	-2.900	0.004
##	flavor_descrPUMPKIN CSK	-0.100	0.014	-0.052	-7.222	0.000
##	flavor_descrRSP CHC CHUNK	0.002	0.018	0.001	0.129	0.898
##	flavor_descrSMORES	0.013	0.012	0.008	1.037	0.300
##	flavor_descrSTR	0.054	0.045	0.008	1.208	0.227
##	flavor_descrSTR CSK	-0.041	0.009	-0.040	-4.519	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.017	0.041	-0.003	-0.415	0.678
##	flavor_descrSWEET CREAM & COOKIES	0.026	0.036	0.005	0.732	0.464
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.031	0.017	-0.013	-1.844	0.065
##	flavor_descrTURTLE SOUP	-0.050	0.012	-0.031	-4.125	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.034	0.011	-0.025	-3.167	0.002
##	flavor_descrVERMONTY PYTHON	-0.020	0.014	-0.010	-1.410	0.159
##	flavor_descrW-N-C-P-C	-0.033	0.009	-0.036	-3.812	0.000
## ##	flavor_descrWHITE RUSSIAN usecoupTRUE	0.185 -0.046	0.147 0.005	0.008 -0.092	1.262 -9.801	0.207 0.000
##	-	0.040		0.092		
##	household_composition2 household_composition3	0.007	0.004 0.005	0.012	1.840 4.126	0.066 0.000
##	household_composition5	0.021	0.003	0.027	7.288	0.000
##	household_composition6	-0.003	0.014	-0.001	-0.201	0.841
##	household_composition7	0.003	0.004	0.001	8.750	0.000
##	household_composition8	0.020	0.005	0.025	3.834	0.000
##	household_income	0.002	0.000	0.072	10.285	0.000
##	microwaveTRUE	-0.037	0.007	-0.032	-4.934	0.000
	m2 02 0 1100 H					

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##										
## ##			Model Summ	nary						
## ##	R		0.356	RMSE		0.14	- - :6			
##	R-Squared		0.127	Coef.	Var	10.10	2			
##	Adj. R-Squar	red	0.124	MSE		0.02	21			
## ##	Pred R-Squar	red	-Inf	MAE		0.11	.0			
## ## ## ##	MSE: Mean S	Mean Square Square Error Absolute Err	<u>-</u>							
##			AA	AVOI						
## ##		Sum of						_		
## ##		Squares		Mean	Square	F	Sig.	_		
	Regression			1	1.068	49.774	0.0000	_		
#	Residual	470.126	21909	9	0.021					
:# :#	Total	538.482	21973	3				_		
##										
## ##					Pa:	rameter 	Estimates			
##				model	Beta	Std.	Error	Std. Beta	t	Sig
‡# ‡#			(Ir	tercept)	1.490		0.011		139.528	0.000
#		S	size1_descr3	32.0 MLOZ	0.301		0.008	0.247	37.476	0.000
#				ouponper1			0.003	0.225	25.281	0.000
#			-	oromoTRUE			0.002	-0.115		0.000
#			_	onCentral			0.003	-0.068		0.000
#			•	gionSouth			0.003	-0.091		0.000
#				egionWest			0.003	-0.057	-6.938	0.000
#			descrAMERICO				0.008	-0.033		0.001
#			or_descrBANA				0.009	-0.045		0.000
#			or_descrBLA				0.030	-0.018	-2.812	0.005
#			_descrBROWN]				0.014	-0.001	-0.169	0.865
#			or_descrBUTT				0.011	-0.006	-0.772	0.440
#		ilav	or_descrCAF				0.010	-0.035	-4.126	0.000
#		£1 1	_	_descrCHC			0.016	-0.002	-0.241	0.810
#			scrCHC ALMON				0.015	-0.007	-0.956	0.339
#			c_descrCHC (0.008	-0.033	-2.992	0.003
#		rravor_des	scrCHC FUDGE	r RKOMNIE	-0.025		0.008	-0.037	-3.291	0.001

-0.030

-0.010

-0.035

-0.046

0.030

-0.047

0.001

-0.010

-0.047

-0.036

0.007

0.010

0.008

0.009

0.021

0.009

0.147

0.010

0.017

0.009

-0.056

-0.008

-0.048

-0.049

0.010

-0.043

0.000

-0.008

-0.019

-0.040

0.000

0.337

0.000

0.000

0.150

0.000

0.997

0.303

0.006

0.000

-4.096

-0.960

-4.464

-5.266

1.438

-5.016

0.004

-1.031

-2.723

-4.183

flavor_descrCHERRY GRCA

flavor_descrCHUBBY HUBBY

 ${\tt flavor_descrCHUNKY\ MONKEY}$

flavor_descrCINNAMON BUNS

flavor_descrCREME BRULEE

flavor_descrFOSSIL FUEL

flavor_descrHALF BAKED

flavor_descrDUBLIN MUDSLIDE

flavor_descrDOUBLE CHC FUDGE SWR

 ${\tt flavor_descrCOFFEE}$

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## flavor_describath CDFFEE CRUNCH	##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.033	0.009	-0.033	-3.667	0.000
## flavor_descrIMAGINE WHIRLED PEACE	##	flavor_descrHEATH COFFEE CRUNCH	-0.020	0.008	-0.027	-2.482	0.013
## flavor_descrMAGNES SUTRA	##	flavor_descrHEATH CRUNCH	-0.001	0.009	-0.001	-0.071	0.943
## flavor_descrMAGIC BROWNIES	##	flavor_descrIMAGINE WHIRLED PEACE	-0.040	0.009	-0.042	-4.604	0.000
## flavor_descrMINT CHC CHUNK	##	flavor_descrKARAMEL SUTRA	-0.031	0.008	-0.036	-3.660	0.000
## flavor_descrNEAPOLITAN DYNAMITE	##	flavor_descrMAGIC BROWNIES	-0.041	0.012	-0.025	-3.354	0.001
## flavor_descrNEW YORK SUPER FUDGE CHUNK	##	flavor_descrMINT CHC CHUNK	0.015	0.014	0.008	1.066	0.287
## flavor_descrOATMEAL COOKIE CHUNK	##	flavor_descrNEAPOLITAN DYNAMITE	-0.022	0.012	-0.013	-1.793	0.073
## flavor_descrONE CSK BROWNIE	##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.032	0.008	-0.041	-3.951	0.000
## flavor_descrOxFORD MINT CHC COOKIE	##	flavor_descrOATMEAL COOKIE CHUNK	-0.020	0.013	-0.012	-1.578	0.115
## flavor_descrPB CUP	##	flavor_descrONE CSK BROWNIE	-0.056	0.009	-0.056	-6.218	0.000
## flavor_descrPBTRUFFLE	##	flavor_descrOXFORD MINT CHC COOKIE	-0.024	0.010	-0.019	-2.322	0.020
## flavor_descrPHISH FOOD -0.020 0.008 -0.026 -2.464 0.014 ## flavor_descrPISTACHIO PISTACHIO -0.025 0.008 -0.028 -2.900 0.004 ### flavor_descrPUMPKIN CSK -0.100 0.014 -0.052 -7.222 0.000 ### flavor_descrRSP CHC CHUNK 0.002 0.018 0.001 0.129 0.898 ### flavor_descrSRP CHC CHUNK 0.002 0.018 0.001 0.129 0.898 ### flavor_descrSTR 0.054 0.045 0.008 1.037 0.300 ### flavor_descrSTR CSK -0.041 0.009 -0.040 -4.519 0.000 ### flavor_descrSTR CSK -0.041 0.009 -0.040 -4.519 0.000 ### flavor_descrSWEET CREAM & COUKIES 0.026 0.036 0.005 0.732 0.464 ### flavor_descrSWEET CREAM & COUKIES 0.026 0.036 0.005 0.732 0.464 ### flavor_descrTNIPLE CARAMEL CHUNK -0.031 0.017 -0.013 -1.844 0.065 ### flavor_descrTVAN CARAMEL FUDGE -0.034 0.011 -0.025 -3.167 0.002 ### flavor_descrVAN CARAMEL FUDGE -0.034 0.011 -0.025 -3.167 0.002 ### flavor_descrVERMONTY PYTHON -0.020 0.014 -0.010 -1.410 0.159 ### flavor_descrW-N-C-P-C -0.033 0.009 -0.036 -3.812 0.000 ### flavor_descrW-N-C-P-C -0.033 0.009 -0.036 -3.812 0.000 ### household_composition2 0.007 0.004 0.012 1.840 0.066 ### household_composition3 0.021 0.005 0.027 4.126 0.000 ### household_composition5 0.022 0.003 0.052 7.288 0.000 ### household_composition6 -0.003 0.014 -0.001 -0.201 0.841 ### household_composition7 0.034 0.004 0.059 8.750 0.000 ### household_composition8 0.020 0.005 0.025 3.834 0.000 ### household_composition8 0.020 0.005 0.025 3.834 0.000 ### household_composition8 0.000 0.005 0.025 3.834 0.000 ### household_composition8 0.000 0.005 0.025 3.834 0.000 ### household_composition8 0.000 0.005 0.005 0.025 3.834 0.000	##	flavor_descrPB CUP	-0.027	0.008	-0.033	-3.275	0.001
## flavor_descrPISTACHIO PISTACHIO	##	flavor_descrPB TRUFFLE	-0.077	0.147	-0.003	-0.528	0.598
## flavor_descrPUMPKIN CSK	##	flavor_descrPHISH FOOD	-0.020	0.008	-0.026	-2.464	
## flavor_descrRSP CHC CHUNK	##	flavor_descrPISTACHIO PISTACHIO	-0.025	0.008	-0.028	-2.900	
## flavor_descrSMORES 0.013 0.012 0.008 1.037 0.300 ## flavor_descrSTR 0.054 0.045 0.008 1.208 0.227 ## flavor_descrSTR CSK -0.041 0.009 -0.040 -4.519 0.000 ## flavor_descrSTRAWBERRIES & CREAM -0.017 0.041 -0.003 -0.415 0.678 ## flavor_descrSWEET CREAM & COOKIES 0.026 0.036 0.005 0.732 0.464 ## flavor_descrTRIPLE CARAMEL CHUNK -0.031 0.017 -0.013 -1.844 0.065 ## flavor_descrTRIPLE CARAMEL SUUP -0.050 0.012 -0.031 -4.125 0.000 ## flavor_descrTVAN CARAMEL FUDGE -0.034 0.011 -0.025 -3.167 0.002 ## flavor_descrVERMONTY PYTHON -0.020 0.014 -0.010 -1.410 0.159 ## flavor_descrW-N-C-P-C -0.033 0.009 -0.036 -3.812 0.000 ## flavor_descrWHITE RUSSIAN 0.185 0.147 0.008 1.262 0.207 ## usecoupTRUE -0.046 0.005 -0.092 -9.801 0.000 ## household_composition2 0.007 0.004 0.012 1.840 0.066 ## household_composition5 0.021 0.005 0.027 4.126 0.000 ## household_composition5 0.022 0.003 0.052 7.288 0.000 ## household_composition6 -0.003 0.014 -0.001 -0.201 0.841 ## household_composition7 0.034 0.004 0.059 8.750 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## household_income 0.002 0.000 0.007 -0.032 -4.934 0.000 ## household_income 0.002 0.000 0.007 -0.032 -4.934 0.000 ## household_income 0.002 0.000 0.007 -0.032 -4.934 0.0000 ## household_income 0.002 0.000 0.007 -0.032 -4.934 0.0000 ## household_income 0.002 0.000 0.007 -0.032 -4.934 0.0000 ## household_income 0.002 0.0	##					-7.222	
## flavor_descrSTR						0.129	
## flavor_descrSTR CSK -0.041 0.009 -0.040 -4.519 0.000 ## flavor_descrSTRAWBERRIES & CREAM -0.017 0.041 -0.003 -0.415 0.678 ## flavor_descrSWEET CREAM & COOKIES 0.026 0.036 0.005 0.732 0.464 ## flavor_descrTRIPLE CARAMEL CHUNK -0.031 0.017 -0.013 -1.844 0.065 ## flavor_descrTURTLE SOUP -0.050 0.012 -0.031 -4.125 0.000 ## flavor_descrVAN CARAMEL FUDGE -0.034 0.011 -0.025 -3.167 0.002 ## flavor_descrVERMONTY PYTHON -0.020 0.014 -0.010 -1.410 0.159 ## flavor_descrW-N-CP-C -0.033 0.009 -0.036 -3.812 0.000 ## flavor_descrW-N-CP-C -0.035 0.147 0.008 1.262 0.207 ## usecoupTRUE -0.046 0.005 -0.092 -9.801 0.000 ## bousehold_composition2 0.007 0.004 0.012 1.840 0.066 ## household_composition5 0.022 0.003 0.052 7.288 0.000 ## household_composition6 -0.003 0.014 -0.001 -0.201 0.841 ## household_composition7 0.034 0.004 0.059 8.750 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000				0.012			
## flavor_descrSTRAWBERRIES & CREAM -0.017 0.041 -0.003 -0.415 0.678 ## flavor_descrSWEET CREAM & COOKIES 0.026 0.036 0.005 0.732 0.464 ## flavor_descrTRIPLE CARAMEL CHUNK -0.031 0.017 -0.013 -1.844 0.065 ## flavor_descrTURTLE SOUP -0.050 0.012 -0.031 -4.125 0.000 ## flavor_descrVAN CARAMEL FUDGE -0.034 0.011 -0.025 -3.167 0.002 ## flavor_descrVERMONTY PYTHON -0.020 0.014 -0.010 -1.410 0.159 ## flavor_descrWHITE RUSSIAN 0.185 0.147 0.008 1.262 0.207 ## usecoupTRUE -0.046 0.005 -0.092 -9.801 0.000 ## household_composition3 0.021 0.005 0.027 4.126 0.000 ## household_composition5 0.022 0.003 0.052 7.288 0.000 ## household_composition6 -0.003 0.014 -0.001 -0.201 0.841 ## household_composition7 0.034 0.004 0.059 8.750 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_composition8 0.020 0.005 0.027 4.934 0.000 ## household_composition8 0.020 0.000 0.072 10.285 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000	##	_				1.208	
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## flavor_descrTRIPLE CARAMEL CHUNK		-					
## flavor_descrTURTLE SOUP -0.050 0.012 -0.031 -4.125 0.000 ## flavor_descrVAN CARAMEL FUDGE -0.034 0.011 -0.025 -3.167 0.002 ## flavor_descrVERMONTY PYTHON -0.020 0.014 -0.010 -1.410 0.159 ## flavor_descrW-N-C-P-C -0.033 0.009 -0.036 -3.812 0.000 ## flavor_descrWHITE RUSSIAN 0.185 0.147 0.008 1.262 0.207 ## usecoupTRUE -0.046 0.005 -0.092 -9.801 0.000 ## household_composition2 0.007 0.004 0.012 1.840 0.066 ## household_composition3 0.021 0.005 0.027 4.126 0.000 ## household_composition5 0.022 0.003 0.052 7.288 0.000 ## household_composition6 -0.003 0.014 -0.001 -0.201 0.841 ## household_composition7 0.034 0.004 0.059 8.750 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## microwaveTRUE -0.037 0.007 -0.032 -4.934 0.000		-					
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## flavor_descrVERMONTY PYTHON -0.020 0.014 -0.010 -1.410 0.159 ## flavor_descrW-N-C-P-C -0.033 0.009 -0.036 -3.812 0.000 ## flavor_descrWHITE RUSSIAN 0.185 0.147 0.008 1.262 0.207 ## usecoupTRUE -0.046 0.005 -0.092 -9.801 0.000 ## household_composition2 0.007 0.004 0.012 1.840 0.066 ## household_composition3 0.021 0.005 0.027 4.126 0.000 ## household_composition5 0.022 0.003 0.052 7.288 0.000 ## household_composition6 -0.003 0.014 -0.001 -0.201 0.841 ## household_composition7 0.034 0.004 0.059 8.750 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## microwaveTRUE -0.037 0.007 -0.032 -4.934 0.000		-					
## flavor_descrW-N-C-P-C -0.033 0.009 -0.036 -3.812 0.000 ## flavor_descrWHITE RUSSIAN 0.185 0.147 0.008 1.262 0.207 ## usecoupTRUE -0.046 0.005 -0.092 -9.801 0.000 ## household_composition2 0.007 0.004 0.012 1.840 0.066 ## household_composition3 0.021 0.005 0.027 4.126 0.000 ## household_composition5 0.022 0.003 0.052 7.288 0.000 ## household_composition6 -0.003 0.014 -0.001 -0.201 0.841 ## household_composition7 0.034 0.004 0.059 8.750 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## microwaveTRUE -0.037 0.007 -0.032 -4.934 0.000		-					
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## household_composition5 0.022 0.003 0.052 7.288 0.000 ## household_composition6 -0.003 0.014 -0.001 -0.201 0.841 ## household_composition7 0.034 0.004 0.059 8.750 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## microwaveTRUE -0.037 0.007 -0.032 -4.934 0.000		- _ -					
## household_composition6 -0.003 0.014 -0.001 -0.201 0.841 ## household_composition7 0.034 0.004 0.059 8.750 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## microwaveTRUE -0.037 0.007 -0.032 -4.934 0.000		- _ -					
## household_composition7 0.034 0.004 0.059 8.750 0.000 ## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## microwaveTRUE -0.037 0.007 -0.032 -4.934 0.000		-					
## household_composition8 0.020 0.005 0.025 3.834 0.000 ## household_income 0.002 0.000 0.072 10.285 0.000 ## microwaveTRUE -0.037 0.007 -0.032 -4.934 0.000		-					
## household_income 0.002 0.000 0.072 10.285 0.000 ## microwaveTRUE -0.037 0.007 -0.032 -4.934 0.000		-					
## microwaveTRUE -0.037 0.007 -0.032 -4.934 0.000		-					
		_					
		microwaveTRUE	-0.037	0.007	-0.032	-4.934	0.000

##

##

Stepwise Selection: Step 10

- sfh added

- SIN added

##		Model Sum	Model Summary				
##							
##	R	0.358	RMSE	0.146			
##	R-Squared	0.128	Coef. Var	10.098			
##	Adj. R-Squared	0.125	MSE	0.021			
##	Pred R-Squared	-Inf	MAE	0.110			
##							

RMSE: Root Mean Square Error

MSE: Mean Square Error MAE: Mean Absolute Error

##

##

##

ANOVA

##						
##		Sum of				
##		Squares	DF	Mean Square	F	Sig.
##						
##	Regression	68.828	65	1.059	49.394	0.0000
##	Residual	469.654	21908	0.021		
##	Total	538.482	21973			
##						

Parameter	Estimatos
Parameter	rstimates

##	model	Beta	Std. Error	Std. Beta	t	Sig
## ##	(Intercept)	1.495	0.011		139.495	0.000
##	size1_descr32.0 MLOZ	0.302	0.008	0.248	37.531	0.000
##	couponper1	0.068	0.003	0.226	25.393	0.000
##	haspromoTRUE	-0.037	0.002	-0.115	-16.256	0.000
##	regionCentral	-0.024	0.003	-0.064	-7.865	0.000
##	regionSouth	-0.029	0.003	-0.086	-10.047	0.000
##	regionWest	-0.019	0.003	-0.054	-6.507	0.000
##	flavor_descrAMERICONE DREAM	-0.027	0.008	-0.034	-3.312	0.001
##	flavor_descrBANANA SPLIT	-0.043	0.009	-0.045	-4.850	0.000
##	flavor_descrBLACK & TAN	-0.087	0.030	-0.019	-2.881	0.004
##	flavor_descrBROWNIE BATTER	-0.002	0.014	-0.001	-0.133	0.894
##	flavor_descrBUTTER PECAN	-0.009	0.011	-0.006	-0.757	0.449
##	flavor_descrCAKE BATTER	-0.040	0.010	-0.035	-4.165	0.000
##	flavor_descrCHC	-0.009	0.016	-0.004	-0.527	0.598
##	flavor_descrCHC ALMOND NOUGAT	-0.015	0.015	-0.007	-1.032	0.302
##	flavor_descrCHC CHIP C-DH	-0.024	0.008	-0.033	-3.010	0.003
##	flavor_descrCHC FUDGE BROWNIE	-0.025	0.008	-0.037	-3.275	0.001
##	flavor_descrCHERRY GRCA	-0.030	0.007	-0.056	-4.106	0.000
##	flavor_descrCHUBBY HUBBY	-0.010	0.010	-0.008	-1.002	0.317
##	flavor_descrCHUNKY MONKEY	-0.035	0.008	-0.048	-4.467	0.000
##	flavor_descrCINNAMON BUNS	-0.046	0.009	-0.049	-5.257	0.000
##	flavor_descrCOFFEE	0.029	0.021	0.009	1.385	0.166
##	flavor_descrCREME BRULEE	-0.048	0.009	-0.043	-5.045	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	-0.007	0.147	0.000	-0.045	0.964
##	flavor_descrDUBLIN MUDSLIDE	-0.011	0.010	-0.009	-1.118	0.264
##	flavor_descrFOSSIL FUEL	-0.046	0.017	-0.018	-2.680	0.007
##	flavor_descrHALF BAKED	-0.036	0.009	-0.040	-4.224	0.000
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.033	0.009	-0.033	-3.675	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.020	0.008	-0.027	-2.529	0.011
##	flavor_descrHEATH CRUNCH	-0.001	0.009	0.000	-0.055	0.956
##	flavor_descrIMAGINE WHIRLED PEACE	-0.041	0.009	-0.043	-4.632	0.000
##	flavor_descrKARAMEL SUTRA	-0.031	0.008	-0.036	-3.699	0.000
##	flavor_descrMAGIC BROWNIES	-0.040	0.012	-0.024	-3.295	0.001
##	flavor_descrMINT CHC CHUNK	0.015	0.014	0.008	1.077	0.282
##	flavor_descrNEAPOLITAN DYNAMITE	-0.023	0.012	-0.014	-1.836	0.066
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.032	0.008	-0.041	-3.955	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.020	0.013	-0.011	-1.557	0.119

##	flavor_descrONE CSK BROWNIE	-0.056	0.009	-0.056	-6.263	0.000
##	flavor_descrOXFORD MINT CHC COOKIE	-0.024	0.010	-0.019	-2.323	0.020
##	flavor_descrPB CUP	-0.027	0.008	-0.033	-3.271	0.001
##	flavor_descrPB TRUFFLE	-0.074	0.147	-0.003	-0.503	0.615
##	flavor_descrPHISH FOOD	-0.020	0.008	-0.026	-2.464	0.014
##	flavor_descrPISTACHIO PISTACHIO	-0.024	0.008	-0.028	-2.868	0.004
##	flavor_descrPUMPKIN CSK	-0.100	0.014	-0.051	-7.208	0.000
##	flavor_descrRSP CHC CHUNK	0.002	0.018	0.001	0.123	0.902
##	flavor_descrSMORES	0.013	0.012	0.008	1.024	0.306
##	flavor_descrSTR	0.053	0.045	0.008	1.179	0.238
##	flavor_descrSTR CSK	-0.042	0.009	-0.041	-4.598	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.019	0.041	-0.003	-0.453	0.651
##	<pre>flavor_descrSWEET CREAM & COOKIES</pre>	0.024	0.036	0.004	0.673	0.501
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.031	0.017	-0.012	-1.821	0.069
##	flavor_descrTURTLE SOUP	-0.050	0.012	-0.030	-4.086	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.036	0.011	-0.027	-3.381	0.001
##	flavor_descrVERMONTY PYTHON	-0.021	0.014	-0.010	-1.459	0.144
##	flavor_descrW-N-C-P-C	-0.032	0.009	-0.036	-3.751	0.000
##	flavor_descrWHITE RUSSIAN	0.187	0.147	0.008	1.278	0.201
##	usecoupTRUE	-0.047	0.005	-0.092	-9.881	0.000
##	${\tt household_composition2}$	0.006	0.004	0.009	1.380	0.168
##	$household_composition3$	0.020	0.005	0.025	3.887	0.000
##	${\tt household_composition5}$	0.019	0.003	0.044	6.019	0.000
##	household_composition6	-0.003	0.014	-0.001	-0.196	0.845
##	${\tt household_composition7}$	0.032	0.004	0.054	7.926	0.000
##	household_composition8	0.018	0.005	0.022	3.423	0.001
##	household_income	0.002	0.000	0.078	10.894	0.000
##	microwaveTRUE	-0.036	0.007	-0.031	-4.802	0.000
##	sfhTRUE	-0.011	0.002	-0.032	-4.696	0.000
##						
##						

##

##

Model Summary

###				
##				
##	R	0.358	RMSE	0.146
##	R-Squared	0.128	Coef. Var	10.098
##	Adj. R-Squared	0.125	MSE	0.021
##	Pred R-Squared	-Inf	MAE	0.110

RMSE: Root Mean Square Error

MSE: Mean Square Error
MAE: Mean Absolute Error

##

ANOVA

##						
##		Sum of				
##		Squares	DF	Mean Square	F	Sig.
##						
##	Regression	68.828	65	1.059	49.394	0.0000
##	Residual	469.654	21908	0.021		
##	Total	538.482	21973			
##						

## ##		Parameter Estimates							
##	model	Beta	Std. Error	Std. Beta	 t	Sig			
##									
##	(Intercept)	1.495	0.011	0.040	139.495	0.000			
##	size1_descr32.0 MLOZ	0.302	0.008	0.248	37.531	0.000			
##	couponper1	0.068	0.003	0.226	25.393	0.000			
##	haspromoTRUE	-0.037	0.002	-0.115	-16.256	0.000			
## ##	regionCentral	-0.024	0.003	-0.064	-7.865 -10.047	0.000			
##	regionSouth	-0.029	0.003	-0.086 -0.054		0.000			
##	regionWest flavor_descrAMERICONE DREAM	-0.019 -0.027	0.003 0.008	-0.034	-6.507 -3.312	0.000			
##	flavor_descrBANANA SPLIT	-0.027	0.009	-0.034	-3.312 -4.850	0.001			
##	flavor_descrBANANA SFLIT flavor_descrBLACK & TAN	-0.043	0.030	-0.045	-4.830 -2.881	0.000			
##	flavor_descrBROWNIE BATTER	-0.007	0.014	-0.019	-0.133	0.004			
##		-0.002	0.014	-0.001	-0.133 -0.757	0.894			
##	flavor_descrBUTTER PECAN flavor_descrCAKE BATTER	-0.040	0.011	-0.035	-4.165	0.000			
##	flavor_descrCHC	-0.009	0.016	-0.004	-0.527	0.598			
##	flavor_descrCHC ALMOND NOUGAT	-0.015	0.015	-0.004	-1.032	0.302			
##	flavor_descrCHC CHIP C-DH	-0.024	0.008	-0.033	-3.010	0.003			
##	flavor_descrCHC FUDGE BROWNIE	-0.025	0.008	-0.037	-3.275	0.001			
##	flavor_descrCHERRY GRCA	-0.030	0.007	-0.056	-4.106	0.000			
##	flavor_descrCHUBBY HUBBY	-0.010	0.010	-0.008	-1.002	0.317			
##	flavor_descrCHUNKY MONKEY	-0.035	0.008	-0.048	-4.467	0.000			
##	flavor_descrCINNAMON BUNS	-0.046	0.009	-0.049	-5.257	0.000			
##	flavor_descrCOFFEE	0.029	0.021	0.009	1.385	0.166			
##	flavor_descrCREME BRULEE	-0.048	0.009	-0.043	-5.045	0.000			
##	flavor_descrDOUBLE CHC FUDGE SWR	-0.007	0.147	0.000	-0.045	0.964			
##	flavor_descrDUBLIN MUDSLIDE	-0.011	0.010	-0.009	-1.118	0.264			
##	flavor_descrFOSSIL FUEL	-0.046	0.017	-0.018	-2.680	0.007			
##	flavor_descrHALF BAKED	-0.036	0.009	-0.040	-4.224	0.000			
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.033	0.009	-0.033	-3.675	0.000			
##	flavor_descrHEATH COFFEE CRUNCH	-0.020	0.008	-0.027	-2.529	0.011			
##	flavor_descrHEATH CRUNCH	-0.001	0.009	0.000	-0.055	0.956			
##	flavor_descrIMAGINE WHIRLED PEACE	-0.041	0.009	-0.043	-4.632	0.000			
##	flavor_descrKARAMEL SUTRA	-0.031	0.008	-0.036	-3.699	0.000			
##	flavor_descrMAGIC BROWNIES	-0.040	0.012	-0.024	-3.295	0.001			
##	flavor_descrMINT CHC CHUNK	0.015	0.014	0.008	1.077	0.282			
##	flavor_descrNEAPOLITAN DYNAMITE	-0.023	0.012	-0.014	-1.836	0.066			
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.032	0.008	-0.041	-3.955	0.000			
##	flavor_descrOATMEAL COOKIE CHUNK	-0.020	0.013	-0.011	-1.557	0.119			
##	flavor_descrONE CSK BROWNIE	-0.056	0.009	-0.056	-6.263	0.000			
##	flavor_descrOXFORD MINT CHC COOKIE	-0.024	0.010	-0.019	-2.323	0.020			
##	flavor_descrPB CUP	-0.027	0.008	-0.033	-3.271	0.001			
##	flavor_descrPB TRUFFLE	-0.074	0.147	-0.003	-0.503	0.615			
##	flavor_descrPHISH FOOD flavor_descrPISTACHIO PISTACHIO	-0.020 -0.024	0.008	-0.026 -0.028	-2.464	0.014			
## ##	flavor_descrPUMPKIN CSK	-0.024	0.008 0.014	-0.028 -0.051	-2.868 -7.208	0.004 0.000			
##	flavor_descrPoMPKIN CSK	0.002	0.014	0.001	0.123	0.000			
##	flavor_descrESP CHC CHONK	0.002	0.018	0.001	1.024	0.902			
##	flavor_descrSTR	0.013	0.012	0.008	1.024	0.308			
##	flavor_descrSTR CSK	-0.042	0.009	-0.041	-4.598	0.238			
##	flavor_descrSTRAWBERRIES & CREAM	-0.019	0.041	-0.003	-0.453	0.651			
##	flavor_descrSWEET CREAM & COOKIES	0.013	0.036	0.004	0.433	0.501			
тπ	TIGVOT_GCSCISWEET OUTLAND & COUNTED	0.024	0.000	0.001	0.010	0.001			

##	flavor_de	scrTRIPLE CARA	MEL CHUNK	ζ -	-0.031	(0.017	-0.012	-	1.821	0.06
#	_	flavor_descrTU	RTLE SOUP		-0.050	(0.012	-0.030	-	4.086	0.00
##	flavor	_descrVAN CARA	MEL FUDGE	: -	-0.036	(0.011	-0.027	-	3.381	0.00
##	flav	or_descrVERMON	TY PYTHON	1 -	-0.021	(0.014	-0.010	-	1.459	0.14
##		flavor_descr	W-N-C-P-C	; -	-0.032	(0.009	-0.036	-	3.751	0.00
##	fl	avor_descrWHIT	E RUSSIAN	1	0.187	(0.147	0.008		1.278	0.20
##		us	ecoupTRUE	-	-0.047	(0.005	-0.092	-	9.881	0.00
##		household_com	position2	2	0.006	(0.004	0.009		1.380	0.16
##		household_com	position3	3	0.020	(0.005	0.025		3.887	0.00
##		household_com	position5	5	0.019	(0.003	0.044		6.019	0.00
##		household_com			-0.003	(0.014	-0.001	-	0.196	0.84
##		household_com			0.032	(0.004	0.054		7.926	0.00
##		household_com	-		0.018		0.005	0.022		3.423	0.00
##			ld_income		0.002		0.000	0.078		0.894	0.00
##		micr	owaveTRUE		-0.036		0.007	-0.031		4.802	0.00
##			sfhTRUE	-	-0.011	(0.002	-0.032	-	4.696	0.00
##								 			
##											
##											
##	a a	a									
-	se Selection:	Step 11									
##	- 4 4 - 4										
## - race ##	auded										
## ##		Model Sum	m o rest								
## ##		muc rouer sum	шату				_				
## ## R		0.359	RMSE		- -	0.146					
## R-Squai	red	0.129	Coef.	Var		10.094					
## Adj. R		0.126	MSE			0.021					
## Pred R	-	-Inf	MAE			0.110					
	-						_				
	Root Mean Sq	uare Error									
	Mean Square E										
	Mean Absolute										
##											
##		A	NOVA								

##						
##		Sum of				
##		Squares	DF	Mean Square	F	Sig.
##						
##	Regression	69.211	68	1.018	47.51	0.0000
##	Residual	469.271	21905	0.021		
##	Total	538.482	21973			
##						

Parameter Estimates

##						
ππ						
##	model	Beta	Std. Error	Std. Beta	t	Sig
						. 0
##						
##	(Intercept)	1.493	0.011		139.228	0.000
##	size1_descr32.0 MLOZ	0.302	0.008	0.248	37.546	0.000
##	couponper1	0.068	0.003	0.225	25.386	0.000
##	haspromoTRUE	-0.037	0.002	-0.115	-16.229	0.000
##	regionCentral	-0.024	0.003	-0.064	-7.851	0.000

##	regionSouth	-0.030	0.003	-0.088	-10.286	0.000
##	regionWest	-0.020	0.003	-0.055	-6.619	0.000
##	flavor_descrAMERICONE DREAM	-0.026	0.008	-0.032	-3.197	0.001
##	flavor_descrBANANA SPLIT	-0.043	0.009	-0.045	-4.882	0.000
##	flavor_descrBLACK & TAN	-0.086	0.030	-0.018	-2.846	0.004
##	flavor_descrBROWNIE BATTER	-0.001	0.014	-0.001	-0.093	0.926
##	flavor_descrBUTTER PECAN	-0.009	0.011	-0.006	-0.800	0.423
##	flavor_descrCAKE BATTER	-0.040	0.010	-0.034	-4.093	0.000
##	flavor_descrCHC	-0.009	0.016	-0.004	-0.538	0.591
##	flavor_descrCHC ALMOND NOUGAT	-0.017	0.015	-0.008	-1.141	0.254
##	flavor_descrCHC CHIP C-DH	-0.024	0.008	-0.033	-3.008	0.003
##	flavor_descrCHC FUDGE BROWNIE	-0.025	0.008	-0.037	-3.291	0.001
##	flavor_descrCHERRY GRCA	-0.030	0.007	-0.056	-4.127	0.000
##	flavor_descrCHUBBY HUBBY	-0.009	0.010	-0.007	-0.872	0.383
##	flavor_descrCHUNKY MONKEY	-0.036	0.008	-0.049	-4.555	0.000
##	flavor_descrCINNAMON BUNS	-0.046	0.009	-0.048	-5.246	0.000
##	flavor_descrCOFFEE	0.030	0.021	0.010	1.434	0.152
##	flavor_descrCREME BRULEE	-0.047	0.009	-0.043	-4.958	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	-0.005	0.147	0.000	-0.032	0.975
##	flavor_descrDUBLIN MUDSLIDE	-0.010	0.010	-0.009	-1.036	0.300
##	flavor_descrFOSSIL FUEL	-0.046	0.017	-0.018	-2.646	0.008
##	flavor_descrHALF BAKED	-0.035	0.009	-0.040	-4.164	0.000
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.033	0.009	-0.032	-3.636	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.019	0.008	-0.026	-2.445	0.014
##	flavor_descrHEATH CRUNCH	0.000	0.009	0.000	0.016	0.987
##	flavor_descrIMAGINE WHIRLED PEACE	-0.040	0.009	-0.042	-4.528	0.000
##	flavor_descrKARAMEL SUTRA	-0.031	0.008	-0.035	-3.645	0.000
##	flavor_descrMAGIC BROWNIES	-0.039	0.012	-0.024	-3.220	0.001
##	flavor_descrMINT CHC CHUNK	0.015	0.014	0.008	1.087	0.277
##	flavor_descrNEAPOLITAN DYNAMITE	-0.023	0.012	-0.014	-1.841	0.066
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.032	0.008	-0.041	-3.946	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.019	0.013	-0.011	-1.518	0.129
##	flavor_descrONE CSK BROWNIE	-0.056	0.009	-0.056	-6.266	0.000
##	flavor_descr0XFORD MINT CHC COOKIE	-0.024	0.010	-0.018	-2.296	0.022
##	flavor_descrPB CUP	-0.026	0.008	-0.032	-3.178	0.001
##	flavor_descrPB TRUFFLE	-0.071	0.147	-0.003	-0.484	0.629
##	flavor_descrPHISH FOOD	-0.019	0.008	-0.025	-2.340	0.019
##	flavor_descrPISTACHIO PISTACHIO	-0.024	0.008	-0.027	-2.814	0.005
##	flavor_descrPUMPKIN CSK	-0.099	0.014	-0.051	-7.165	0.000
##	flavor_descrRSP CHC CHUNK	0.003	0.018	0.001	0.177	0.859
##	flavor_descrSMORES	0.011	0.012	0.007	0.930	0.352
##	flavor_descrSTR	0.048	0.045	0.007	1.079	0.281
##	flavor_descrSTR CSK	-0.042	0.009	-0.041	-4.599	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.017	0.041	-0.003	-0.410	0.682
##	flavor_descrSWEET CREAM & COOKIES	0.023	0.036	0.004 -0.013	0.634	0.526
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.031 -0.049	0.017		-1.846	0.065
## ##	flavor_descrTURTLE SOUP flavor_descrVAN CARAMEL FUDGE	-0.049 -0.037	0.012 0.011	-0.030 -0.027	-4.055 -3.446	0.000
	flavor_descrvERMONTY PYTHON	-0.037 -0.020	0.014			0.001
##	_			-0.010	-1.391	
##	flavor_descrW-N-C-P-C	-0.032	0.009	-0.036 0.008	-3.762 1.286	0.000
## ##	flavor_descrWHITE RUSSIAN	0.189 -0.047	0.147 0.005	-0.008	1.286 -9.954	0.198 0.000
##	usecoupTRUE household_composition2	0.005	0.004	0.008	1.154	0.000
##	household_composition3	0.005	0.004	0.008	3.732	0.249
##	Honzenora_combostcion2	0.013	0.005	0.024	0.102	0.000

##		househol	d_composit:	ion5	0.018	(0.003	0.043	5.943	0.000
##			d_composit:		-0.002	(0.014	-0.001	-0.159	0.874
##		househol	d_composit:	ion7	0.032	(0.004	0.055	8.097	0.000
##			d_composit:		0.018	(0.005	0.022	3.452	0.001
##		ho	usehold_ind		0.002	(0.000	0.077	10.803	0.000
##			microwave?	ΓRUE	-0.035	(0.007	-0.030	-4.758	0.000
##			sfh.	ΓRUE	-0.011		0.002	-0.031	-4.441	0.000
##			raceb		0.014		0.004	0.023	3.620	0.000
##			raceas	sian	0.001	(0.006	0.001	0.146	0.884
##			raceo	ther	0.012	(0.005	0.015	2.383	0.017
##										
##										
##										
##										
##		Mode	l Summary							
##							_			
##			9 RMS			0.146				
	R-Squared		9 Co		ar	10.094				
##	Adj. R-Squared	0.12	6 MSI	Ξ.		0.021				
##	Pred R-Squared	-In:	f MAI	Ξ		0.110				
							_			
	RMSE: Root Mean	_	r							
	MSE: Mean Square									
##	MAE: Mean Absolu	ite Error								
##										
##			ANOVA							
								-		
##		ım of			_					
##	Squ			1ean	Square	F	Sig.			
##					4 040			-		
	Regression 69	9.211	68		1.018	47.51	0.0000			
	Residual 469				0.021					
##	Total 538									
##								-		
##					Par	ameter E	stimates			
##						owerer E	 			
##				odel	Beta	Std. I	Error	Std. Beta	t	Sig
##							 			~±6
##			(Interce	ept)	1.493	(0.011		139.228	0.000
##		size1 o	descr32.0 M	_	0.302		0.008	0.248	37.546	0.000
##		· · · · · - <u>-</u> ·	coupon		0.068		0.003	0.225	25.386	0.000
##			haspromo		-0.037		0.002	-0.115	-16.229	0.000
##			regionCent		-0.024		0.003	-0.064	-7.851	0.000
##			regionSo		-0.030		0.003	-0.088	-10.286	0.000
##			region		-0.020		0.003	-0.055	-6.619	0.000
##	fl	avor_descrAl	•		-0.026		0.008	-0.032	-3.197	0.001
##		flavor_des			-0.043		0.009	-0.045	-4.882	0.000
##			scrBLACK &		-0.086		0.030	-0.018	-2.846	0.004
##	f	lavor_descr			-0.001		0.014	-0.001	-0.093	0.926
##		flavor_des			-0.009		0.011	-0.006	-0.800	0.423
		flavor_dea	CCCCAKE DAS	רידים	-0.040	(0.010	-0.034	-4.093	0.000
##		TTAVOT_de	SCICANE DA.	IIER	0.040	,	0.010	0.004	1.000	0.000
## ##			lavor_desci		-0.009		0.016	-0.004	-0.538	0.591

-0.017

0.015

-0.008

0.254

-1.141

flavor_descrCHC ALMOND NOUGAT

##

##	flavor_descrCHC CHIP C-DH	-0.024	0.008	-0.033	-3.008	0.003
##	flavor_descrCHC FUDGE BROWNIE	-0.025	0.008	-0.037	-3.291	0.001
##	flavor_descrCHERRY GRCA	-0.030	0.007	-0.056	-4.127	0.000
##	flavor_descrCHUBBY HUBBY	-0.009	0.010	-0.007	-0.872	0.383
##	flavor_descrCHUNKY MONKEY	-0.036	0.008	-0.049	-4.555	0.000
##	flavor_descrCINNAMON BUNS	-0.046	0.009	-0.048	-5.246	0.000
##	flavor_descrCOFFEE	0.030	0.021	0.010	1.434	0.152
##	flavor_descrCREME BRULEE	-0.047	0.009	-0.043	-4.958	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	-0.005	0.147	0.000	-0.032	0.975
##	flavor_descrDUBLIN MUDSLIDE	-0.010	0.010	-0.009	-1.036	0.300
##	flavor_descrFOSSIL FUEL	-0.046	0.017	-0.018	-2.646	0.008
##	flavor_descrHALF BAKED	-0.035	0.009	-0.040	-4.164	0.000
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.033	0.009	-0.032	-3.636	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.019	0.008	-0.026	-2.445	0.014
##	flavor_descrHEATH CRUNCH	0.000	0.009	0.000	0.016	0.987
##	flavor_descrIMAGINE WHIRLED PEACE	-0.040	0.009	-0.042	-4.528	0.000
##	flavor_descrKARAMEL SUTRA	-0.031	0.008	-0.035	-3.645	0.000
##	flavor_descrMAGIC BROWNIES	-0.039	0.012	-0.024	-3.220	0.001
##	flavor_descrMINT CHC CHUNK	0.015	0.014	0.008	1.087	0.277
##	flavor_descrNEAPOLITAN DYNAMITE	-0.023	0.012	-0.014	-1.841	0.066
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.032	0.008	-0.041	-3.946	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.019	0.013	-0.011	-1.518	0.129
##	flavor_descrONE CSK BROWNIE	-0.056	0.009	-0.056	-6.266	0.000
##	<pre>flavor_descrOXFORD MINT CHC COOKIE</pre>	-0.024	0.010	-0.018	-2.296	0.022
##	flavor_descrPB CUP	-0.026	0.008	-0.032	-3.178	0.001
##	flavor_descrPB TRUFFLE	-0.071	0.147	-0.003	-0.484	0.629
##	flavor_descrPHISH FOOD	-0.019	0.008	-0.025	-2.340	0.019
##	flavor_descrPISTACHIO PISTACHIO	-0.024	0.008	-0.027	-2.814	0.005
##	flavor_descrPUMPKIN CSK	-0.099	0.014	-0.051	-7.165	0.000
##	flavor_descrRSP CHC CHUNK	0.003	0.018	0.001	0.177	0.859
##	flavor_descrSMORES	0.011	0.012	0.007	0.930	0.352
##	flavor_descrSTR	0.048	0.045	0.007	1.079	0.281
##	flavor_descrSTR CSK	-0.042	0.009	-0.041	-4.599	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.017	0.041	-0.003	-0.410	0.682
##	flavor_descrSWEET CREAM & COOKIES	0.023	0.036	0.004	0.634	0.526
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.031	0.017	-0.013	-1.846	0.065
##	flavor_descrTURTLE SOUP	-0.049	0.012	-0.030	-4.055	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.037	0.011	-0.027	-3.446	0.001
##	flavor_descrVERMONTY PYTHON	-0.020	0.014	-0.010	-1.391	0.164
##	flavor_descrW-N-C-P-C	-0.032	0.009	-0.036	-3.762	0.000
##	flavor_descrWHITE RUSSIAN	0.189	0.147	0.008	1.286	0.198
##	usecoupTRUE	-0.047	0.005	-0.093	-9.954	0.000
##	household_composition2	0.005	0.004	0.008	1.154	0.249
##	household_composition3	0.019	0.005	0.024	3.732	0.000
##	household_composition5	0.018	0.003	0.043	5.943	0.000
##	household_composition6	-0.002	0.014	-0.001	-0.159	0.874
##	household_composition7	0.032	0.004	0.055	8.097	0.000
##	household_composition8	0.018	0.005	0.022	3.452	0.001
##	household_income	0.002 -0.035	0.000 0.007	0.077 -0.030	10.803	0.000
## ##	microwaveTRUE	-0.035 -0.011	0.007	-0.030 -0.031	-4.758 -4.441	0.000
##	sfhTRUE raceblack	0.011	0.002	0.031	3.620	0.000
##	raceasian	0.014	0.004	0.023	0.146	0.884
##	raceother	0.001	0.005	0.001	2.383	0.004
##	raceother	0.012	0.005	0.013	2.505	0.017

Stepwise Selection: Step 12 ## - household size added ## Model Summary ## --_____ RMSE ## R 0.359 0.146 0.129 Coef. Var 10.091 ## R-Squared ## Adj. R-Squared 0.126 MSE 0.021 ## Pred R-Squared 0.110 MAERMSE: Root Mean Square Error ## MSE: Mean Square Error ## MAE: Mean Absolute Error ## ## ANOVA ## -----Sum of DF Mean Square F Sig. ## Squares ## -----______ 69 ## Regression 69.489 1.007 47.036 0.0000 ## Residual 468.992 21904 0.021 ## Total 538.482 21973 ## Parameter Estimates Sig Beta Std. Error Std. Beta model## 1.502 0.011 136.322 0.000 (Intercept) 0.302 ## size1_descr32.0 MLOZ 0.008 0.248 37.609 0.000 ## couponper1 0.068 0.003 0.225 25.369 0.000 ## haspromoTRUE -0.037 0.002 -0.115 -16.288 0.000 ## regionCentral -0.024 0.003 -0.064 -7.865 0.000 -10.363 ## regionSouth -0.030 0.003 -0.088 0.000 ## -0.019 regionWest 0.003 -0.054-6.536 0.000 -0.026 flavor_descrAMERICONE DREAM -3.121 ## 0.008 -0.032 0.002 ## flavor_descrBANANA SPLIT -0.042-0.044-4.7590.000 0.009 ## flavor_descrBLACK & TAN -0.084 0.030 -0.018 -2.806 0.005 ## flavor_descrBROWNIE BATTER 0.000 -0.019 0.984 0.014 0.000 -0.784 ## flavor_descrBUTTER PECAN -0.009 0.011 -0.006 0.433 ## -0.038 -0.033 -3.956flavor_descrCAKE BATTER 0.010 0.000 -0.504 ## flavor_descrCHC -0.008 0.016 -0.003 0.614 ## flavor_descrCHC ALMOND NOUGAT -0.0170.015 -0.008 -1.135 0.256 ## flavor_descrCHC CHIP C-DH -0.022 0.008 -0.031 -2.8200.005 ## flavor_descrCHC FUDGE BROWNIE -0.024 0.008 -0.035 -3.120 0.002 ## -4.121 flavor_descrCHERRY GRCA -0.030 0.007 -0.056 0.000

-0.008

-0.035

-0.045

0.010

0.008

0.009

-0.006

-0.048

-0.047

-0.776

-4.457

-5.126

0.438

0.000

0.000

flavor_descrCHUBBY HUBBY

flavor_descrCHUNKY MONKEY

flavor_descrCINNAMON BUNS

##

##

##

## flavor_descrCDFEE 0.030 0.021 0.010 1.448 0.148 ## flavor_descrCDENE_RBRULEE 0.030 0.147 0.000 0.024 0.981 ## flavor_descrDUBLIN MUDSLIDE 0.010 0.010 0.000 0.024 0.981 ## flavor_descrDUBLIN MUDSLIDE 0.010 0.010 0.000 0.035 0.315 ## flavor_descrDUBLIN MUDSLIDE 0.010 0.010 0.000 0.035 0.360 ## flavor_descrHEATH_CARNED 0.032 0.009 0.038 0.3972 0.000 ## flavor_descrHEATH_CARNED BUT THE 0.032 0.009 0.032 0.3560 0.000 ## flavor_descrHEATH_COMPTEE CRUNCH 0.010 0.009 0.003 0.315 0.386 ## flavor_descrHEATH_COMPTEE CRUNCH 0.010 0.009 0.001 0.131 0.896 ## flavor_descrHEATH_COMPTEE CRUNCH 0.001 0.009 0.001 0.131 0.896 ## flavor_descrHEATH_COMPTEE CRUNCH 0.001 0.009 0.001 0.131 0.896 ## flavor_descrHEATH_COMPTEE CRUNCH 0.001 0.009 0.001 0.131 0.896 ## flavor_descrHEATH_COMPTEE 0.001 0.009 0.001 0.013 0.896 ## flavor_descrHEATH_COMPTEE 0.000 0.000 0.000 0.001 0.001 0.000 ## flavor_descrHEATH_COMPTEE 0.000 0.000 0.001 0.001 0.000 0.001 0.000 ## flavor_descrHEATH_COMPTEE 0.003 0.009 0.001 0.001 0.000 0.001 0.000 ## flavor_descrHEATH_COMPTEE 0.002 0.012 0.003 0.3177 0.007 ## flavor_descrHEATH_COMPTEE 0.002 0.012 0.003 0.000 0.005 0.005 0.005 ## flavor_descrDED HINT FICK COMPTE 0.003 0.000 0.005 0.005 0.000 0.005 0.000 ## flavor_descrDED HINT FICK COMPTE 0.002 0.013 0.000 0.005 0.000 0.005 0.000 0.005 0.000 0.005 0.000 0.005 0.000 0.							
## flavor_descrDUBLE CHC FUDGE SWR	##	flavor_descrCOFFEE	0.030	0.021	0.010	1.448	0.148
## flavor_describustlin Mudbilide ## flavor_describustlin Mudbilide ## flavor_describustlin Mudbilide ## flavor_describustlin Mudbilide ## flavor_describustling ## flavor_	##	flavor_descrCREME BRULEE	-0.047	0.009	-0.042	-4.945	0.000
## flavor_descrPOSSIL FUEL flavor_descrHEATH CANDY EVERYTHING BUT THE flavor_descrHEATH CANDY EVERYTHING BUT THE flavor_descrHEATH CANDY EVERYTHING BUT THE flavor_descrHEATH CONFEE CRUNCH -0.019 0.008 -0.025 -2.384 0.019 ## flavor_descrEATH CONFEE CRUNCH -0.019 0.008 -0.025 -2.384 0.019 ## flavor_descrEATH CONFEE CRUNCH -0.019 0.008 -0.025 -2.384 0.019 ## flavor_descrEATH CONFEE CRUNCH -0.019 0.008 -0.025 -2.384 0.019 ## flavor_descrEATH CONFEE CRUNCH -0.019 0.009 -0.001 -4.415 0.090 ## flavor_descrEATH CONFEE CRUNCH -0.039 0.009 -0.041 -4.415 0.090 ## flavor_descrEAMELE_SUTRA 0.030 0.008 -0.035 -3.576 0.000 ## flavor_descrEAMELE_SUTRA 0.030 0.008 -0.035 -3.576 0.000 ## flavor_descrEATHOT CRUNCH 0.016 0.012 0.023 -3.148 0.022 ## flavor_descrENEAPOLITAN DYNAMITE -0.022 0.012 -0.013 -1.771 0.077 ## flavor_descrENEAPOLITAN DYNAMITE -0.022 0.012 -0.013 -1.771 0.077 ## flavor_descrEATHOT CRUNCK 0.018 0.016 0.004 -3.882 0.000 ## flavor_descrEATHECE CHUNK -0.031 0.006 -0.040 -3.882 0.000 ## flavor_descrEATHECE CRUNCH 0.055 0.009 -0.055 -6.073 0.000 ## flavor_descrEATHECE CRUNCH 0.025 0.008 -0.031 -3.055 0.002 ## flavor_descrEATHECE CRUNCH 0.025 0.008 -0.031 -3.055 0.002 ## flavor_descrEATHECE CRUNCH 0.0025 0.008 -0.031 -3.055 0.002 ## flavor_descrEATHECE CRUNCH 0.0025 0.008 -0.031 -3.055 0.002 ## flavor_descrEATHECE CRUNCH 0.0025 0.008 -0.027 -2.766 0.006 ## flavor_descrEATHECE CRUNCH 0.004 0.018 0.001 0.019 0.031 ## flavor_descrEATHECE CRUNCH 0.004 0.018 0.001 0.019 0.031 ## flavor_descrEATHECE CRUNCH 0.004 0.018 0.001 0.019 0.043 ## flavor_descrEATHECE CRUNCH 0.004 0.004 0.007 0.007 0.009 0.003 ## flavor_descrEATHECE CRUNCH 0.004 0.004 0.007 0.009 0.003 0.004 0.006 0.004 ## flavor_descrEATHECE CRUNCH 0.004 0.004 0.007 0.009 0.003 0.004 0.006 0.004 ## flavor_descrEATHECE CRUNCH 0.004 0.004 0.007 0.009 0.003 0.004 0.006 0.004 ## flavor_descrEATHECE CRUNCH 0.004 0.004 0.007 0.009 0.003 0.004 0.006 0.004 ## flavor_descrEATHECE CRUNCH 0.009 0.005 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.0	##	flavor_descrDOUBLE CHC FUDGE SWR		0.147	0.000	-0.024	0.981
## flavor_describalf_BAKED	##		-0.010	0.010	-0.008	-1.006	0.315
## flavor_descrHEATH CAMPY EVERYTHING BUT THE	##	flavor_descrFOSSIL FUEL	-0.045	0.017	-0.018	-2.617	0.009
## flavor_describtATH_COFFEE CRUNCH	##					-3.972	
## flavor_descrimatine Runner ## flavor_descrimatine Wiriled PEACE		flavor_descrHEATH CANDY EVERYTHING BUT THE				-3.560	
## flavor_descrMAGINE WHIRLED PEACE		-					
## flavor_descrMARAMEL_SUTRA	##			0.009		0.131	
## flavor_descrMAGIC BROWNIES ## flavor_descrNEACIC CHUNK		-					
## flavor_descrNENTCHC CHUNK		-					
## flavor_descrNEAPOLITAN DYNAMITE							
## flavor_descrNEW YORK SUPER FUDGE CHUNK							
## flavor_descrOATMEAL COOKIE CHUNK		-					
## flavor_descrONE CSK BROWNIE		_					
## flavor_descrOXFORD MINT CHC COOKLE		_					
## flavor_descrPB CUP		_					
## flavor_descrPB TRUFFLE		_					
## flavor_descrPHISH F00D							
## flavor_descrPISTACHIO PISTACHIO		_					
## flavor_descrPUMPKIN CSK							
## flavor_descrRSP CHC CHUNK		_					
## flavor_descrSMORES 0.013 0.012 0.008 1.058 0.290 ## flavor_descrSTR 0.047 0.045 0.007 1.056 0.291 ## flavor_descrSTR CSK -0.041 0.009 -0.039 -4.435 0.000 ## flavor_descrSTRAWBERRIES & CREAM -0.016 0.041 -0.002 -0.383 0.702 ## flavor_descrSWEET CREAM & C00KIES 0.023 0.036 0.004 0.626 0.532 ## flavor_descrSWEET CREAM & C00KIES 0.023 0.036 0.004 0.626 0.532 ## flavor_descrTRIPLE CARAMEL CHUNK -0.030 0.017 -0.012 -1.785 0.074 ## flavor_descrTVATILE SOUP -0.048 0.012 -0.030 -3.977 0.000 ## flavor_descrVAN CARAMEL FUDGE -0.037 0.011 -0.027 -3.392 0.001 ## flavor_descrVANCARAMEL FUDGE -0.037 0.011 -0.027 -3.392 0.001 ## flavor_descrVANCARAMEL FUDGE -0.037 0.011 -0.027 -3.392 0.001 ## flavor_descrVANCARAMEL FUDGE -0.032 0.009 -0.036 -3.714 0.000 ## flavor_descrWHITE RUSSIAN 0.186 0.146 0.008 1.269 0.205 ## usecoupTRUE -0.047 0.005 -0.093 -9.954 0.000 ## household_composition3 0.019 0.005 -0.093 -9.954 0.000 ## household_composition3 0.019 0.005 0.023 3.628 0.000 ## household_composition5 0.012 0.004 0.028 3.279 0.001 ## household_composition6 -0.005 0.014 -0.002 -0.363 0.717 ## household_composition7 0.026 0.004 0.044 5.830 0.000 ## household_composition8 0.015 0.004 0.044 5.830 0.000 ## household_composition8 0.015 0.005 0.019 2.859 0.004 ## household_composition8 0.015 0.004 0.004 0.044 5.830 0.000 ## household_composition8 0.015 0.005 0.019 2.859 0.004 ## household_composition8 0.015 0.000 0.077 10.822 0.000 ## household_composition8 0.015 0.000 0.077 10.822 0.000 ## microwaveTRUE -0.036 0.007 -0.031 -4.807 0.000 ## microwaveTRUE -0.010 0.002 -0.029 -4.106 0.000 ## praceblack 0.015 0.004 0.004 0.004 3.746 0.000 ## raceblack 0.015 0.004 0.004 0.004 0.016 0.876 ## raceblack 0.015 0.005 0.016 2.573 0.010 ## praceblack 0.015 0.005 0.016 2.573 0.010							
## flavor_descrSTR O.047 0.045 0.007 1.056 0.291 ## flavor_descrSTR CSK -0.041 0.009 -0.039 -4.435 0.000 ## flavor_descrSTRAWBERRIES & CREAM -0.016 0.041 -0.002 -0.383 0.702 ## flavor_descrSWEET CREAM & COOKIES 0.023 0.036 0.004 0.626 0.532 ## flavor_descrTRIPLE CARAMEL CHUNK -0.030 0.017 -0.012 -1.785 0.074 ## flavor_descrTVRTLE SOUP -0.048 0.012 -0.030 -3.977 0.000 ## flavor_descrVAN CARAMEL FUDGE -0.037 0.011 -0.027 -3.392 0.001 ## flavor_descrVERMONTY PYTHON -0.017 0.014 -0.009 -1.230 0.219 ## flavor_descrVHITE RUSSIAN 0.186 0.146 0.008 1.269 0.205 ## usecoupTRUE -0.047 0.005 -0.093 -9.954 0.000 ## household_composition3 0.019 0.005 0.023 3.628 0.000 ## household_composition5 0.012 0.004 0.002 3.279 0.001 ## household_composition6 -0.005 0.014 -0.002 -0.363 0.717 ## household_composition7 0.026 0.004 0.004 5.830 0.000 ## household_composition8 0.015 0.005 0.019 2.859 0.004 ## household_composition8 0.015 0.006 0.007 -0.031 -4.807 0.000 ## household_income 0.002 0.000 0.077 10.822 0.000 ## raceblack 0.015 0.004 0.024 3.746 0.000 ## raceblack 0.015 0.004 0.024 3.746 0.000 ## raceblack 0.015 0.004 0.004 0.024 3.746 0.000 ## raceblack 0.015 0.004 0.004 0.004 0.006 0.001 0.156 0.876 ## racecther 0.013 0.005 0.016 2.573 0.010		_					
## flavor_descrSTR CSK		_					
## flavor_descrSTRAWBERRIES & CREAM -0.016		_					
## flavor_descrSWEET CREAM & COOKIES							
## flavor_descrTRIPLE CARAMEL CHUNK		_					
## flavor_descrTURTLE SOUP -0.048		_					
## flavor_descrVAN CARAMEL FUDGE		_					
## flavor_descrVERMONTY PYTHON -0.017 0.014 -0.009 -1.230 0.219 ## flavor_descrW-N-C-P-C -0.032 0.009 -0.036 -3.714 0.000 ## flavor_descrWHITE RUSSIAN 0.186 0.146 0.008 1.269 0.205 ## usecoupTRUE -0.047 0.005 -0.093 -9.954 0.000 ## household_composition2 0.004 0.004 0.007 0.971 0.331 ## household_composition3 0.019 0.005 0.023 3.628 0.000 ## household_composition5 0.012 0.004 0.028 3.279 0.001 ## household_composition6 -0.005 0.014 -0.002 -0.363 0.717 ## household_composition7 0.026 0.004 0.044 5.830 0.000 ## household_composition8 0.015 0.005 0.019 2.859 0.004 ## household_income 0.002 0.000 0.077 10.822 0.000 ## household_income 0.002 0.000 0.077 10.822 0.000 ## sfhTRUE -0.036 0.007 -0.031 -4.807 0.000 ## sfhTRUE -0.010 0.002 -0.029 -4.106 0.000 ## raceblack 0.015 0.004 0.024 3.746 0.000 ## raceblack 0.015 0.006 0.001 0.156 0.876 ## household_size -0.003 0.001 -0.030 -3.605 0.000		_					
## flavor_descrW-N-C-P-C -0.032 0.009 -0.036 -3.714 0.000 ## flavor_descrWHITE RUSSIAN 0.186 0.146 0.008 1.269 0.205 ## usecoupTRUE -0.047 0.005 -0.093 -9.954 0.000 ## household_composition2 0.004 0.004 0.007 0.971 0.331 ## household_composition3 0.019 0.005 0.023 3.628 0.000 ## household_composition5 0.012 0.004 0.028 3.279 0.001 ## household_composition6 -0.005 0.014 -0.002 -0.363 0.717 ## household_composition7 0.026 0.004 0.044 5.830 0.000 ## household_composition8 0.015 0.005 0.019 2.859 0.004 ## household_income 0.002 0.000 0.077 10.822 0.000 ## household_income 0.002 0.000 0.077 10.822 0.000 ## sfhTRUE -0.036 0.007 -0.031 -4.807 0.000 ## sfhTRUE -0.010 0.002 -0.029 -4.106 0.000 ## raceblack 0.015 0.004 0.024 3.746 0.000 ## raceblack 0.015 0.006 0.001 0.156 0.876 ## raceother 0.013 0.005 0.016 2.573 0.010 ## household_size -0.003 0.001 -0.030 -3.605 0.000		-					
## flavor_descrWHITE RUSSIAN 0.186 0.146 0.008 1.269 0.205 ## usecoupTRUE		_					
## household_composition2							
## household_composition2 0.004 0.004 0.007 0.971 0.331 ## household_composition3 0.019 0.005 0.023 3.628 0.000 ## household_composition5 0.012 0.004 0.028 3.279 0.001 ## household_composition6 -0.005 0.014 -0.002 -0.363 0.717 ## household_composition7 0.026 0.004 0.044 5.830 0.000 ## household_composition8 0.015 0.005 0.019 2.859 0.004 ## household_income 0.002 0.000 0.077 10.822 0.000 ## household_income 0.002 0.000 0.077 10.822 0.000 ## sfhTRUE -0.036 0.007 -0.031 -4.807 0.000 ## sfhTRUE -0.010 0.002 -0.029 -4.106 0.000 ## raceblack 0.015 0.004 0.024 3.746 0.000 ## raceasian 0.001 0.006 0.001 0.156 0.876 ## raceother 0.013 0.005 0.016 2.573 0.010 ## household_size -0.003 0.001 -0.030 -3.605 0.000							
## household_composition3 0.019 0.005 0.023 3.628 0.000 ## household_composition5 0.012 0.004 0.028 3.279 0.001 ## household_composition6 -0.005 0.014 -0.002 -0.363 0.717 ## household_composition7 0.026 0.004 0.044 5.830 0.000 ## household_composition8 0.015 0.005 0.019 2.859 0.004 ## household_income 0.002 0.000 0.077 10.822 0.000 ## household_income 0.002 0.000 0.077 10.822 0.000 ## sfhTRUE -0.036 0.007 -0.031 -4.807 0.000 ## sfhTRUE -0.010 0.002 -0.029 -4.106 0.000 ## raceblack 0.015 0.004 0.024 3.746 0.000 ## raceother 0.013 0.006 0.001 0.156 0.876 ## household_size -0.003 0.001 -0.030 -3.605 0.000		-					
## household_composition5							
## household_composition6 -0.005		_ - •					
## household_composition7 0.026 0.004 0.044 5.830 0.000 ## household_composition8 0.015 0.005 0.019 2.859 0.004 ## household_income 0.002 0.000 0.077 10.822 0.000 ## microwaveTRUE -0.036 0.007 -0.031 -4.807 0.000 ## sfhTRUE -0.010 0.002 -0.029 -4.106 0.000 ## praceblack 0.015 0.004 0.024 3.746 0.000 ## pracesian 0.001 0.006 0.001 0.156 0.876 ## praceother 0.013 0.005 0.016 2.573 0.010 ## household_size -0.003 0.001 -0.030 -3.605 0.000							
## household_composition8							
## household_income 0.002 0.000 0.077 10.822 0.000 ## pricrowaveTRUE -0.036 0.007 -0.031 -4.807 0.000 ## sfhTRUE -0.010 0.002 -0.029 -4.106 0.000 ## raceblack 0.015 0.004 0.024 3.746 0.000 ## raceasian 0.001 0.006 0.001 0.156 0.876 ## raceother 0.013 0.005 0.016 2.573 0.010 ## household_size -0.003 0.001 -0.030 -3.605 0.000							
## microwaveTRUE -0.036		_ -					
## sfhTRUE -0.010 0.002 -0.029 -4.106 0.000 ## raceblack 0.015 0.004 0.024 3.746 0.000 ## raceasian 0.001 0.006 0.001 0.156 0.876 ## raceother 0.013 0.005 0.016 2.573 0.010 ## household_size -0.003 0.001 -0.030 -3.605 0.000		-					
## raceblack 0.015 0.004 0.024 3.746 0.000 ## raceasian 0.001 0.006 0.001 0.156 0.876 ## raceother 0.013 0.005 0.016 2.573 0.010 ## household_size -0.003 0.001 -0.030 -3.605 0.000							
## raceasian 0.001 0.006 0.001 0.156 0.876 ## raceother 0.013 0.005 0.016 2.573 0.010 ## household_size -0.003 0.001 -0.030 -3.605 0.000							
## raceother 0.013 0.005 0.016 2.573 0.010 ## household_size -0.003 0.001 -0.030 -3.605 0.000							
## household_size -0.003 0.001 -0.030 -3.605 0.000							

##
##
Model Summary

##

##				
##	R	0.359	RMSE	0.146
##	R-Squared	0.129	Coef. Var	10.091
##	Adj. R-Squared	0.126	MSE	0.021
##	Pred R-Squared	-Inf	MAE	0.110

RMSE: Root Mean Square Error

MSE: Mean Square Error
MAE: Mean Absolute Error

##

##

ANOVA

##						
##		Sum of				
##		Squares	DF	Mean Square	F	Sig.
##						
##	Regression	69.489	69	1.007	47.036	0.0000
##	Residual	468.992	21904	0.021		
##	Total	538.482	21973			

Parameter Estimates

##						
## ##	model	Beta	Std. Error	Std. Beta	t	Sig
##	(Intercept)	1.502	0.011		136.322	0.000
##	size1_descr32.0 MLOZ	0.302	0.008	0.248	37.609	0.000
##	couponper1	0.068	0.003	0.225	25.369	0.000
##	haspromoTRUE	-0.037	0.002	-0.115	-16.288	0.000
##	regionCentral	-0.024	0.003	-0.064	-7.865	0.000
##	regionSouth	-0.030	0.003	-0.088	-10.363	0.000
##	regionWest	-0.019	0.003	-0.054	-6.536	0.000
##	flavor_descrAMERICONE DREAM	-0.026	0.008	-0.032	-3.121	0.002
##	flavor_descrBANANA SPLIT	-0.042	0.009	-0.044	-4.759	0.000
##	flavor_descrBLACK & TAN	-0.084	0.030	-0.018	-2.806	0.005
##	flavor_descrBROWNIE BATTER	0.000	0.014	0.000	-0.019	0.984
##	flavor_descrBUTTER PECAN	-0.009	0.011	-0.006	-0.784	0.433
##	flavor_descrCAKE BATTER	-0.038	0.010	-0.033	-3.956	0.000
##	flavor_descrCHC	-0.008	0.016	-0.003	-0.504	0.614
##	flavor_descrCHC ALMOND NOUGAT	-0.017	0.015	-0.008	-1.135	0.256
##	flavor_descrCHC CHIP C-DH	-0.022	0.008	-0.031	-2.820	0.005
##	flavor_descrCHC FUDGE BROWNIE	-0.024	0.008	-0.035	-3.120	0.002
##	flavor_descrCHERRY GRCA	-0.030	0.007	-0.056	-4.121	0.000
##	flavor_descrCHUBBY HUBBY	-0.008	0.010	-0.006	-0.776	0.438
##	flavor_descrCHUNKY MONKEY	-0.035	0.008	-0.048	-4.457	0.000
##	flavor_descrCINNAMON BUNS	-0.045	0.009	-0.047	-5.126	0.000
##	flavor_descrCOFFEE	0.030	0.021	0.010	1.448	0.148
##	flavor_descrCREME BRULEE	-0.047	0.009	-0.042	-4.945	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	-0.003	0.147	0.000	-0.024	0.981
##	flavor_descrDUBLIN MUDSLIDE	-0.010	0.010	-0.008	-1.006	0.315
##	flavor_descrFOSSIL FUEL	-0.045	0.017	-0.018	-2.617	0.009
##	flavor_descrHALF BAKED	-0.034	0.009	-0.038	-3.972	0.000
	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.032	0.009	-0.032	-3.560	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.019	0.008	-0.025	-2.354	0.019
##	flavor_descrHEATH CRUNCH	0.001	0.009	0.001	0.131	0.896

##	flavor_descrIMAGINE WHIRLED PEACE	-0.039	0.009	-0.041	-4.415	0.000
##	flavor_descrKARAMEL SUTRA	-0.030	0.008	-0.035	-3.576	0.000
##	flavor_descrMAGIC BROWNIES	-0.039	0.012	-0.023	-3.148	0.002
##	flavor_descrMINT CHC CHUNK	0.016	0.014	0.008	1.162	0.245
##	flavor_descrNEAPOLITAN DYNAMITE	-0.022	0.012	-0.013	-1.771	0.077
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.031	0.008	-0.040	-3.832	0.000
##	flavor_descrOATMEAL COOKIE CHUNK	-0.018	0.013	-0.011	-1.467	0.142
##	flavor_descrONE CSK BROWNIE	-0.055	0.009	-0.055	-6.073	0.000
##	flavor_descrOXFORD MINT CHC COOKIE	-0.023	0.010	-0.018	-2.200	0.028
##	flavor_descrPB CUP	-0.025	0.008	-0.031	-3.055	0.002
##	flavor_descrPB TRUFFLE	-0.062	0.147	-0.003	-0.425	0.671
##	flavor_descrPHISH FOOD	-0.018	0.008	-0.023	-2.187	0.029
##	flavor_descrPISTACHIO PISTACHIO	-0.023	0.008	-0.027	-2.766	0.006
##	flavor_descrPUMPKIN CSK	-0.098	0.014	-0.050	-7.040	0.000
##	flavor_descrRSP CHC CHUNK	0.004	0.018	0.001	0.199	0.843
##	flavor_descrSMORES	0.013	0.012	0.008	1.058	0.290
##	flavor_descrSTR	0.047	0.045	0.007	1.056	0.291
##	flavor_descrSTR CSK	-0.041	0.009	-0.039	-4.435	0.000
##	flavor_descrSTRAWBERRIES & CREAM	-0.016	0.041	-0.002	-0.383	0.702
##	flavor_descrSWEET CREAM & COOKIES	0.023	0.036	0.004	0.626	0.532
##	flavor_descrTRIPLE CARAMEL CHUNK	-0.030	0.017	-0.012	-1.785	0.074
##	flavor_descrTURTLE SOUP	-0.048	0.012	-0.030	-3.977	0.000
##	flavor_descrVAN CARAMEL FUDGE	-0.037	0.011	-0.027	-3.392	0.001
##	flavor_descrVERMONTY PYTHON	-0.017	0.014	-0.009	-1.230	0.219
##	flavor_descrW-N-C-P-C	-0.032	0.009	-0.036	-3.714	0.000
##	flavor_descrWHITE RUSSIAN	0.186	0.146	0.008	1.269	0.205
##	usecoupTRUE	-0.047	0.005	-0.093	-9.954	0.000
##	household_composition2	0.004	0.004	0.007	0.971	0.331
##	household_composition3	0.019	0.005	0.023	3.628	0.000
##	household_composition5	0.012	0.004	0.028	3.279	0.001
##	household_composition6	-0.005	0.014	-0.002	-0.363	0.717
##	household_composition7	0.026	0.004	0.044	5.830	0.000
##	household_composition8	0.015	0.005	0.019	2.859	0.004
##	household_income	0.002	0.000	0.077	10.822	0.000
##	microwaveTRUE	-0.036	0.007	-0.031	-4.807	0.000
##	sfhTRUE	-0.010	0.002	-0.029	-4.106	0.000
##	raceblack	0.015	0.004	0.024	3.746	0.000
##	raceasian	0.001	0.006	0.001	0.156	0.876
##	raceother	0.013	0.005	0.016	2.573	0.010
##	household_size	-0.003	0.001	-0.030	-3.605	0.000

##

##

##

Stepwise Selection: Step 13

- tvcable added

Model Summary

R 0.359 RMSE 0.146

R-Squared 0.129 Coef. Var 10.092

Adj. R-Squared 0.126 MSE 0.021

Pred R-Squared -Inf MAE 0.110

RMSE: Root Mean Square Error
MSE: Mean Square Error
MAE: Mean Absolute Error

##

##

ANOVA

##						
##		Sum of				
##		Squares	DF	Mean Square	F	Sig.
##						
##	Regression	69.212	70	0.989	46.178	0.0000
##	Residual	468.252	21869	0.021		
##	Total	537.464	21939			
##						

Parameter Estimates

##	model	Beta	Std. Error	Std. Beta	t	Sig
##						
##	(Intercept)	1.501	0.011		135.774	0.000
##	size1_descr32.0 MLOZ	0.302	0.008	0.247	37.484	0.000
##	couponper1	0.068	0.003	0.225	25.325	0.000
##	haspromoTRUE	-0.036	0.002	-0.115	-16.147	0.000
##	regionCentral	-0.023	0.003	-0.062	-7.581	0.000
##	regionSouth	-0.029	0.003	-0.086	-9.955	0.000
##	regionWest	-0.018	0.003	-0.052	-6.200	0.000
##	flavor_descrAMERICONE DREAM	-0.026	0.008	-0.032	-3.154	0.002
##	flavor_descrBANANA SPLIT	-0.042	0.009	-0.044	-4.772	0.000
##	flavor_descrBLACK & TAN	-0.083	0.030	-0.018	-2.776	0.006
##	flavor_descrBROWNIE BATTER	-0.001	0.014	0.000	-0.037	0.970
##	flavor_descrBUTTER PECAN	-0.010	0.011	-0.006	-0.837	0.402
##	flavor_descrCAKE BATTER	-0.039	0.010	-0.033	-3.977	0.000
##	flavor_descrCHC	-0.011	0.016	-0.005	-0.658	0.511
##	flavor_descrCHC ALMOND NOUGAT	-0.016	0.015	-0.007	-1.047	0.295
##	flavor_descrCHC CHIP C-DH	-0.022	0.008	-0.031	-2.819	0.005
##	flavor_descrCHC FUDGE BROWNIE	-0.025	0.008	-0.036	-3.201	0.001
##	flavor_descrCHERRY GRCA	-0.030	0.007	-0.057	-4.165	0.000
##	flavor_descrCHUBBY HUBBY	-0.008	0.010	-0.006	-0.761	0.447
##	flavor_descrCHUNKY MONKEY	-0.035	0.008	-0.049	-4.494	0.000
##	flavor_descrCINNAMON BUNS	-0.045	0.009	-0.047	-5.113	0.000
##	flavor_descrCOFFEE	0.029	0.021	0.009	1.422	0.155
##	flavor_descrCREME BRULEE	-0.047	0.009	-0.043	-4.962	0.000
##	flavor_descrDOUBLE CHC FUDGE SWR	-0.004	0.147	0.000	-0.030	0.976
##	flavor_descrDUBLIN MUDSLIDE	-0.010	0.010	-0.008	-1.013	0.311
##	flavor_descrFOSSIL FUEL	-0.045	0.017	-0.018	-2.613	0.009
##	flavor_descrHALF BAKED	-0.034	0.009	-0.038	-3.972	0.000
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.033	0.009	-0.032	-3.574	0.000
##	flavor_descrHEATH COFFEE CRUNCH	-0.019	0.008	-0.026	-2.405	0.016
##	flavor_descrHEATH CRUNCH	0.001	0.009	0.001	0.106	0.916
##	flavor_descrIMAGINE WHIRLED PEACE	-0.039	0.009	-0.041	-4.424	0.000
##	flavor_descrKARAMEL SUTRA	-0.030	0.008	-0.035	-3.600	0.000
##	flavor_descrMAGIC BROWNIES	-0.039	0.012	-0.023	-3.151	0.002
##	flavor_descrMINT CHC CHUNK	0.016	0.014	0.008	1.132	0.258
##	flavor_descrNEAPOLITAN DYNAMITE	-0.022	0.012	-0.013	-1.749	0.080

```
##
       flavor_descrNEW YORK SUPER FUDGE CHUNK
                                                    -0.031
                                                                    0.008
                                                                                 -0.040
                                                                                             -3.815
                                                                                                        0.000
##
             flavor_descrOATMEAL COOKIE CHUNK
                                                    -0.018
                                                                    0.013
                                                                                 -0.011
                                                                                             -1.438
                                                                                                        0.150
                   flavor descrONE CSK BROWNIE
##
                                                    -0.055
                                                                    0.009
                                                                                 -0.055
                                                                                             -6.084
                                                                                                        0.000
           flavor_descrOXFORD MINT CHC COOKIE
##
                                                    -0.023
                                                                                             -2.219
                                                                    0.010
                                                                                 -0.018
                                                                                                        0.026
##
                             flavor_descrPB CUP
                                                    -0.026
                                                                    0.008
                                                                                 -0.031
                                                                                             -3.115
                                                                                                        0.002
                        flavor descrPB TRUFFLE
                                                    -0.060
##
                                                                                 -0.003
                                                                                             -0.406
                                                                                                        0.685
                                                                    0.147
                        flavor descrPHISH FOOD
##
                                                    -0.018
                                                                    0.008
                                                                                 -0.023
                                                                                             -2.199
                                                                                                        0.028
##
               flavor descrPISTACHIO PISTACHIO
                                                    -0.024
                                                                    0.008
                                                                                 -0.027
                                                                                             -2.810
                                                                                                        0.005
##
                       flavor_descrPUMPKIN CSK
                                                    -0.098
                                                                    0.014
                                                                                 -0.050
                                                                                             -7.044
                                                                                                        0.000
##
                     flavor_descrRSP CHC CHUNK
                                                     0.004
                                                                    0.018
                                                                                  0.001
                                                                                              0.213
                                                                                                        0.831
##
                             flavor_descrSMORES
                                                     0.012
                                                                    0.012
                                                                                  0.007
                                                                                              1.003
                                                                                                        0.316
##
                                flavor_descrSTR
                                                                                                        0.290
                                                     0.047
                                                                    0.045
                                                                                  0.007
                                                                                              1.059
                                                    -0.041
##
                           flavor_descrSTR CSK
                                                                                             -4.477
                                                                                                        0.000
                                                                    0.009
                                                                                 -0.040
                                                                                                        0.696
##
             flavor_descrSTRAWBERRIES & CREAM
                                                    -0.016
                                                                    0.041
                                                                                 -0.002
                                                                                             -0.390
##
            flavor_descrSWEET CREAM & COOKIES
                                                     0.023
                                                                    0.036
                                                                                  0.004
                                                                                              0.641
                                                                                                        0.521
##
             flavor_descrTRIPLE CARAMEL CHUNK
                                                    -0.031
                                                                    0.017
                                                                                 -0.012
                                                                                             -1.809
                                                                                                        0.070
##
                       flavor_descrTURTLE SOUP
                                                    -0.048
                                                                                 -0.029
                                                                                             -3.954
                                                                                                        0.000
                                                                    0.012
##
                 flavor descrVAN CARAMEL FUDGE
                                                    -0.037
                                                                                 -0.027
                                                                                             -3.462
                                                                                                        0.001
                                                                    0.011
                   flavor_descrVERMONTY PYTHON
##
                                                    -0.018
                                                                                 -0.009
                                                                                             -1.232
                                                                                                        0.218
                                                                    0.014
##
                         flavor_descrW-N-C-P-C
                                                    -0.032
                                                                    0.009
                                                                                 -0.036
                                                                                             -3.743
                                                                                                        0.000
##
                     flavor_descrWHITE RUSSIAN
                                                     0.183
                                                                    0.147
                                                                                  0.008
                                                                                              1.250
                                                                                                        0.211
##
                                                    -0.047
                                                                                            -10.015
                                                                                                        0.000
                                    usecoupTRUE
                                                                    0.005
                                                                                 -0.094
##
                        household_composition2
                                                     0.003
                                                                    0.004
                                                                                  0.006
                                                                                              0.836
                                                                                                        0.403
##
                        household composition3
                                                     0.018
                                                                    0.005
                                                                                  0.023
                                                                                              3.561
                                                                                                        0.000
##
                        household_composition5
                                                     0.011
                                                                    0.004
                                                                                  0.027
                                                                                              3.154
                                                                                                        0.002
##
                        household_composition6
                                                    -0.005
                                                                    0.014
                                                                                 -0.002
                                                                                             -0.358
                                                                                                        0.720
##
                        household_composition7
                                                                                                        0.000
                                                     0.025
                                                                    0.004
                                                                                  0.042
                                                                                              5.586
##
                        household_composition8
                                                     0.014
                                                                    0.005
                                                                                  0.018
                                                                                              2.732
                                                                                                        0.006
##
                               household_income
                                                                                                        0.000
                                                     0.002
                                                                    0.000
                                                                                  0.075
                                                                                             10.446
##
                                  microwaveTRUE
                                                    -0.038
                                                                                             -5.017
                                                                                                        0.000
                                                                    0.007
                                                                                 -0.032
##
                                         sfhTRUE
                                                    -0.009
                                                                    0.002
                                                                                 -0.026
                                                                                             -3.733
                                                                                                        0.000
##
                                      raceblack
                                                     0.015
                                                                    0.004
                                                                                  0.024
                                                                                              3.679
                                                                                                        0.000
##
                                                     0.001
                                                                    0.006
                                                                                  0.001
                                                                                              0.145
                                                                                                        0.885
                                      raceasian
##
                                                                                              2.604
                                                                                                        0.009
                                      raceother
                                                     0.013
                                                                    0.005
                                                                                  0.017
##
                                 household_size
                                                    -0.004
                                                                                 -0.030
                                                                                             -3.627
                                                                                                        0.000
                                                                    0.001
##
                                    tvcableTRUE
                                                     0.005
                                                                    0.002
                                                                                  0.015
                                                                                              2.337
                                                                                                        0.019
##
##
##
```

Model Summary

##				
##	R	0.359	RMSE	0.146
##	R-Squared	0.129	Coef. Var	10.092
##	Adj. R-Squared	0.126	MSE	0.021
##	Pred R-Squared	-Inf	MAE	0.110

RMSE: Root Mean Square Error MSE: Mean Square Error ## MAE: Mean Absolute Error ##

ANOVA

##

Sum of

##	Squares	DF	Mean	Square	F	Sig.			
##	Regression 69.212	70		0.989	46.178	0.0000	_		
	Residual 468.252	21869		0.989	40.170	0.0000			
	Total 537.464	21939		0.021					
##							_		
##									
##				Pa	rameter	Estimates			
##									
##			model	Beta	Std.	Error	Std. Beta	t	Sig
##									
##		(Inter	cept)	1.501		0.011		135.774	0.000
##	size1_	descr32.0) MLOZ	0.302		0.008	0.247	37.484	0.000
##		_	nper1	0.068		0.003	0.225	25.325	0.000
##		haspron		-0.036		0.002	-0.115	-16.147	0.000
##		regionCe				0.003	-0.062	-7.581	0.000
##		region		-0.029		0.003	-0.086	-9.955	0.000
##	<u> </u>			-0.018		0.003	-0.052	-6.200	0.000
##	flavor_descrA			-0.026		0.008	-0.032	-3.154	0.002
##	flavor_des			-0.042		0.009	-0.044	-4.772	0.000
##	flavor_de			-0.083		0.030	-0.018	-2.776	0.006
##	flavor_descr			-0.001		0.014	0.000	-0.037	0.970
##	flavor_des flavor_de			-0.010 -0.039		0.011 0.010	-0.006 -0.033	-0.837 -3.977	0.402
##	_	lavor_des		-0.011		0.016	-0.005	-0.658	0.511
##	flavor_descrCHC	_		-0.011		0.015	-0.007	-1.047	0.295
##	flavor_desc					0.018	-0.031	-2.819	0.005
##	flavor_descrCHC			-0.025		0.008	-0.036	-3.201	0.001
##	flavor_de			-0.030		0.007	-0.057	-4.165	0.000
##	flavor_des			-0.008		0.010	-0.006	-0.761	0.447
##	flavor_desc			-0.035		0.008	-0.049	-4.494	0.000
##	flavor_desc	rCINNAMON	BUNS	-0.045		0.009	-0.047	-5.113	0.000
##	flav	or_descr(OFFEE	0.029		0.021	0.009	1.422	0.155
##	flavor_des	crCREME E	RULEE	-0.047		0.009	-0.043	-4.962	0.000
##	flavor_descrDOUBLE	CHC FUDO	E SWR	-0.004		0.147	0.000	-0.030	0.976
##	flavor_descrD			-0.010		0.010	-0.008	-1.013	0.311
##	flavor_de	scrFOSSII	. FUEL	-0.045		0.017	-0.018	-2.613	0.009
##	_	escrHALF		-0.034		0.009	-0.038	-3.972	0.000
	flavor_descrHEATH CANDY EVER			-0.033		0.009	-0.032	-3.574	0.000
##	flavor_descrHEATH			-0.019		0.008	-0.026	-2.405	0.016
##	flavor_des			0.001		0.009	0.001	0.106	0.916
##	flavor_descrIMAGINE			-0.039		0.009	-0.041	-4.424	0.000
## ##	flavor_desc flavor_descr			-0.030 -0.039		0.008 0.012	-0.035 -0.023	-3.600 -3.151	0.000 0.002
##	flavor_descr			0.039		0.012	0.023	1.132	0.002
##	flavor_descrNEAPO			-0.022		0.014	-0.013	-1.749	0.080
##	flavor_descrNEW YORK SUP			-0.031		0.008	-0.040	-3.815	0.000
##	flavor_descrOATMEA			-0.018		0.003	-0.011	-1.438	0.150
##	flavor_descr0			-0.055		0.009	-0.055	-6.084	0.000
##	flavor_descrOXFORD M			-0.023		0.010	-0.018	-2.219	0.026
##	_	or_descrF		-0.026		0.008	-0.031	-3.115	0.002
##		escrPB TF		-0.060		0.147	-0.003	-0.406	0.685
##	flavor_d	escrPHISH	FOOD	-0.018		0.008	-0.023	-2.199	0.028
##	${ t flavor_descrPISTA}$	CHIO PIST	CACHIO	-0.024		0.008	-0.027	-2.810	0.005

```
##
                      flavor_descrPUMPKIN CSK
                                                -0.098
                                                               0.014
                                                                           -0.050
                                                                                      -7.044
##
                   flavor_descrRSP CHC CHUNK
                                                 0.004
                                                               0.018
                                                                            0.001
                                                                                       0.213
                                                               0.012
                                                                            0.007
##
                          flavor_descrSMORES
                                                 0.012
                                                                                       1.003
##
                                                 0.047
                             flavor_descrSTR
                                                               0.045
                                                                            0.007
                                                                                       1.059
##
                         flavor_descrSTR CSK
                                                -0.041
                                                               0.009
                                                                           -0.040
                                                                                      -4.477
##
            flavor descrSTRAWBERRIES & CREAM
                                                -0.016
                                                                           -0.002
                                                                                      -0.390
                                                               0.041
            flavor descrSWEET CREAM & COOKIES
##
                                                 0.023
                                                               0.036
                                                                            0.004
                                                                                       0.641
##
            flavor_descrTRIPLE CARAMEL CHUNK
                                                -0.031
                                                               0.017
                                                                           -0.012
                                                                                      -1.809
                                                                                      -3.954
##
                      flavor_descrTURTLE SOUP
                                                -0.048
                                                               0.012
                                                                           -0.029
##
                flavor_descrVAN CARAMEL FUDGE
                                                -0.037
                                                               0.011
                                                                           -0.027
                                                                                      -3.462
##
                  flavor_descrVERMONTY PYTHON
                                                -0.018
                                                               0.014
                                                                           -0.009
                                                                                      -1.232
##
                        flavor_descrW-N-C-P-C
                                                -0.032
                                                               0.009
                                                                           -0.036
                                                                                      -3.743
##
                   flavor_descrWHITE RUSSIAN
                                                 0.183
                                                                            0.008
                                                               0.147
                                                                                       1.250
##
                                 usecoupTRUE
                                                -0.047
                                                               0.005
                                                                           -0.094
                                                                                     -10.015
##
                      household_composition2
                                                 0.003
                                                               0.004
                                                                            0.006
                                                                                       0.836
##
                       household_composition3
                                                 0.018
                                                               0.005
                                                                            0.023
                                                                                       3.561
##
                      household_composition5
                                                 0.011
                                                               0.004
                                                                            0.027
                                                                                       3.154
##
                       household composition6
                                                -0.005
                                                                           -0.002
                                                                                      -0.358
                                                               0.014
##
                      household_composition7
                                                 0.025
                                                               0.004
                                                                            0.042
                                                                                       5.586
##
                      household composition8
                                                 0.014
                                                               0.005
                                                                            0.018
                                                                                       2.732
##
                            household_income
                                                 0.002
                                                               0.000
                                                                            0.075
                                                                                      10.446
##
                               microwaveTRUE
                                                -0.038
                                                               0.007
                                                                           -0.032
                                                                                      -5.017
##
                                                -0.009
                                                                                      -3.733
                                     sfhTRUE
                                                               0.002
                                                                           -0.026
##
                                   raceblack
                                                 0.015
                                                               0.004
                                                                            0.024
                                                                                       3.679
##
                                   raceasian
                                                0.001
                                                               0.006
                                                                            0.001
                                                                                       0.145
##
                                   raceother
                                                 0.013
                                                               0.005
                                                                            0.017
                                                                                       2.604
##
                                                -0.004
                                                                           -0.030
                              household_size
                                                               0.001
                                                                                      -3.627
##
                                 tvcableTRUE
                                                 0.005
                                                               0.002
                                                                            0.015
                                                                                       2.337
##
##
##
  No more variables to be added/removed.
##
## Final Model Output
## -----
##
                          Model Summary
##
  ______
                                      RMSE
                          0.359
                                                          0.146
                                      Coef. Var
                                                         10.092
## R-Squared
                          0.129
## Adj. R-Squared
                          0.126
                                      MSE
                                                          0.021
## Pred R-Squared
                           -Inf
                                                          0.110
                                      MAE
  RMSE: Root Mean Square Error
##
  MSE: Mean Square Error
##
   MAE: Mean Absolute Error
##
##
                                  ANOVA
##
                 Sum of
##
```

0.000

0.831

0.316

0.290

0.000

0.696

0.521

0.070

0.000

0.001

0.218

0.000

0.211

0.000

0.403

0.000

0.002

0.720

0.000

0.006

0.000

0.000

0.000

0.000

0.885

0.009

0.000

0.019

Mean Square

F

DF

##

Squares

Regression 69.212 70 0.989 46.178 0.0000 ## Residual 468.252 21869 0.021 ## Total 537.464 21939

##										
## ##	Darameter Estimates									
##	Parameter Estimates									
##	model	Beta	Std. Error	Std. Beta	t	Sig				
##										
##	(Intercept)	1.501	0.011		135.774	0.000				
##	size1_descr32.0 MLOZ	0.302	0.008	0.247	37.484	0.000				
##	couponper1	0.068	0.003	0.225	25.325	0.000				
##	haspromoTRUE	-0.036	0.002	-0.115	-16.147	0.000				
##	regionCentral	-0.023	0.003	-0.062	-7.581	0.000				
##	regionSouth	-0.029	0.003	-0.086	-9.955	0.000				
##	regionWest	-0.018	0.003	-0.052	-6.200	0.000				
##	flavor_descrAMERICONE DREAM	-0.026	0.008	-0.032	-3.154	0.002				
##	flavor_descrBANANA SPLIT	-0.042	0.009	-0.044	-4.772	0.000				
##	flavor_descrBLACK & TAN	-0.083	0.030	-0.018	-2.776	0.006				
##	flavor_descrBROWNIE BATTER	-0.001	0.014	0.000	-0.037	0.970				
##	flavor_descrBUTTER PECAN	-0.010	0.011	-0.006	-0.837	0.402				
##	flavor_descrCAKE BATTER	-0.039	0.010	-0.033	-3.977	0.000				
##	flavor_descrCHC	-0.011	0.016	-0.005	-0.658	0.511				
##	flavor_descrCHC ALMOND NOUGAT	-0.016	0.015	-0.007	-1.047	0.295				
##	flavor_descrCHC CHIP C-DH	-0.022	0.008	-0.031	-2.819	0.005				
##	flavor_descrCHC FUDGE BROWNIE	-0.025	0.008	-0.036	-3.201	0.001				
##	flavor_descrCHERRY GRCA	-0.030	0.007	-0.057	-4.165	0.000				
##	flavor_descrCHUBBY HUBBY	-0.008	0.010	-0.006	-0.761	0.447				
##	flavor_descrCHUNKY MONKEY	-0.035	0.008	-0.049	-4.494	0.000				
##	flavor_descrCINNAMON BUNS	-0.045	0.009	-0.047	-5.113	0.000				
##	flavor_descrCOFFEE	0.029	0.021	0.009	1.422	0.155				
##	flavor_descrCREME BRULEE	-0.047	0.009	-0.043	-4.962	0.000				
##	flavor_descrDOUBLE CHC FUDGE SWR	-0.004	0.147	0.000	-0.030	0.976				
##	flavor_descrDUBLIN MUDSLIDE	-0.010	0.010	-0.008	-1.013	0.311				
##	flavor_descrFOSSIL FUEL	-0.045	0.017	-0.018	-2.613	0.009				
##	flavor_descrHALF BAKED	-0.034	0.009	-0.038	-3.972	0.000				
##	flavor_descrHEATH CANDY EVERYTHING BUT THE	-0.033	0.009	-0.032	-3.574	0.000				
##	flavor_descrHEATH COFFEE CRUNCH	-0.019	0.008	-0.026	-2.405	0.016				
##	flavor_descrHEATH CRUNCH	0.001	0.009	0.001	0.106	0.916				
##	flavor_descrIMAGINE WHIRLED PEACE	-0.039	0.009	-0.041	-4.424	0.000				
##	flavor_descrKARAMEL SUTRA	-0.030	0.008	-0.035	-3.600	0.000				
##	flavor_descrMAGIC BROWNIES	-0.039	0.012	-0.023	-3.151	0.002				
##	flavor_descrMINT CHC CHUNK	0.016	0.014	0.008	1.132	0.258				
##	flavor_descrNEAPOLITAN DYNAMITE	-0.022	0.012	-0.013	-1.749	0.080				
##	flavor_descrNEW YORK SUPER FUDGE CHUNK	-0.031	0.008	-0.040	-3.815	0.000				
##	flavor_descrOATMEAL COOKIE CHUNK	-0.018	0.013	-0.011	-1.438	0.150				
##	flavor_descrONE CSK BROWNIE	-0.055	0.009	-0.055	-6.084	0.000				
##	flavor_descrOXFORD MINT CHC COOKIE	-0.023	0.010	-0.018	-2.219	0.026				
##	flavor_descrPB CUP	-0.026	0.008	-0.031	-3.115	0.002				
##	flavor_descrPB TRUFFLE	-0.060	0.147	-0.003	-0.406	0.685				
##	flavor_descrPHISH FOOD	-0.018	0.008	-0.023	-2.199	0.028				
##	flavor_descrPISTACHIO PISTACHIO	-0.024	0.008	-0.027	-2.810	0.005				
##	flavor_descrPUMPKIN CSK	-0.098	0.014	-0.050	-7.044	0.000				
##	flavor_descrRSP CHC CHUNK	0.004	0.018	0.001	0.213	0.831				

```
##
                            flavor descrSMORES
                                                     0.012
                                                                    0.012
                                                                                  0.007
                                                                                              1.003
                                                                                                        0.316
##
                                                     0.047
                                                                    0.045
                                                                                  0.007
                                                                                                        0.290
                                flavor_descrSTR
                                                                                              1.059
##
                           flavor descrSTR CSK
                                                    -0.041
                                                                    0.009
                                                                                 -0.040
                                                                                             -4.477
                                                                                                        0.000
##
             flavor_descrSTRAWBERRIES & CREAM
                                                    -0.016
                                                                                 -0.002
                                                                                             -0.390
                                                                                                        0.696
                                                                    0.041
##
            flavor_descrSWEET CREAM & COOKIES
                                                     0.023
                                                                    0.036
                                                                                  0.004
                                                                                              0.641
                                                                                                        0.521
                                                                                                        0.070
##
             flavor descrTRIPLE CARAMEL CHUNK
                                                    -0.031
                                                                    0.017
                                                                                 -0.012
                                                                                             -1.809
                                                                                                        0.000
##
                       flavor descrTURTLE SOUP
                                                    -0.048
                                                                    0.012
                                                                                 -0.029
                                                                                             -3.954
##
                 flavor descrVAN CARAMEL FUDGE
                                                    -0.037
                                                                    0.011
                                                                                 -0.027
                                                                                             -3.462
                                                                                                        0.001
##
                   flavor descrVERMONTY PYTHON
                                                    -0.018
                                                                    0.014
                                                                                 -0.009
                                                                                             -1.232
                                                                                                        0.218
##
                         flavor_descrW-N-C-P-C
                                                    -0.032
                                                                    0.009
                                                                                 -0.036
                                                                                             -3.743
                                                                                                        0.000
##
                     flavor_descrWHITE RUSSIAN
                                                     0.183
                                                                    0.147
                                                                                  0.008
                                                                                              1.250
                                                                                                        0.211
                                                                                                        0.000
##
                                    usecoupTRUE
                                                    -0.047
                                                                    0.005
                                                                                 -0.094
                                                                                            -10.015
##
                        household_composition2
                                                     0.003
                                                                    0.004
                                                                                  0.006
                                                                                              0.836
                                                                                                        0.403
                                                     0.018
##
                        household_composition3
                                                                    0.005
                                                                                  0.023
                                                                                              3.561
                                                                                                        0.000
##
                                                                                                        0.002
                        household_composition5
                                                     0.011
                                                                    0.004
                                                                                  0.027
                                                                                              3.154
##
                        household_composition6
                                                    -0.005
                                                                    0.014
                                                                                 -0.002
                                                                                             -0.358
                                                                                                        0.720
                                                                                                        0.000
##
                        household_composition7
                                                     0.025
                                                                    0.004
                                                                                  0.042
                                                                                              5.586
##
                        household composition8
                                                     0.014
                                                                    0.005
                                                                                  0.018
                                                                                              2.732
                                                                                                        0.006
##
                                                                                                        0.000
                              household_income
                                                     0.002
                                                                    0.000
                                                                                  0.075
                                                                                             10.446
##
                                  microwaveTRUE
                                                    -0.038
                                                                    0.007
                                                                                 -0.032
                                                                                             -5.017
                                                                                                        0.000
##
                                        sfhTRUE
                                                    -0.009
                                                                    0.002
                                                                                 -0.026
                                                                                             -3.733
                                                                                                        0.000
##
                                                     0.015
                                                                                                        0.000
                                      raceblack
                                                                    0.004
                                                                                  0.024
                                                                                              3.679
                                                     0.001
##
                                                                                                        0.885
                                      raceasian
                                                                    0.006
                                                                                  0.001
                                                                                              0.145
##
                                      raceother
                                                     0.013
                                                                    0.005
                                                                                  0.017
                                                                                              2.604
                                                                                                        0.009
##
                                 household size
                                                    -0.004
                                                                    0.001
                                                                                 -0.030
                                                                                             -3.627
                                                                                                        0.000
                                    tvcableTRUE
                                                     0.005
                                                                    0.002
                                                                                  0.015
                                                                                              2.337
                                                                                                        0.019
##
```

```
#
### Consider selected variables only and create a separate data frame
                                                                                  #
df_sel_var <- data.frame(df$y, df$size1_descr, df$couponper1,df$haspromo,
                                                                                  #
                         df$region, df$flavor_descr,df$usecoup,
                         df$household_composition, df$household_income,
                                                                                  #
                         df$microwave, df$sfh, df$race, df$household_size,
                         df$tvcable)
                                                                                  #
                                                                                  #
model_improved <- glm(y ~ df$size1_descr+ df$couponper1+df$haspromo+
                      df$region+df$flavor_descr+df$usecoup+
                      df$household composition+df$household income+
                                                                                  #
                      df$microwave+ df$sfh+ df$race+ df$household size+
                      df$tvcable +df$couponper1:df$region +
                                                                                  #
                      df$couponper1:df$race)
                                                                                  #
                                                                                  #
summary(model_improved)
```

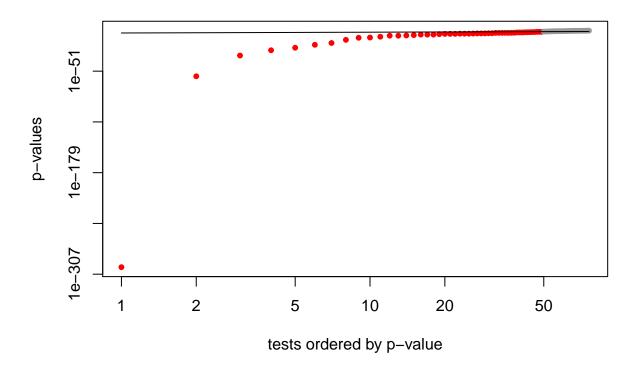
```
##
## Call:
   glm(formula = y ~ df$size1_descr + df$couponper1 + df$haspromo +
       df$region + df$flavor_descr + df$usecoup + df$household_composition +
##
##
       df$household_income + df$microwave + df$sfh + df$race + df$household_size +
##
       df$tvcable + df$couponper1:df$region + df$couponper1:df$race)
##
## Deviance Residuals:
##
        Min
                   1Q
                         Median
                                        3Q
                                                 Max
## -1.46594 -0.06882
                        0.00887
                                   0.08818
                                             0.64145
##
```

```
## Coefficients:
##
                                                  Estimate Std. Error
## (Intercept)
                                                 1.5013796 0.0110605
## df$size1_descr32.0 MLOZ
                                                 0.3018985 0.0080435
## df$couponper1
                                                 0.0581430 0.0049269
## df$haspromoTRUE
                                                -0.0364471 0.0022599
## df$regionCentral
                                                -0.0260421 0.0031870
## df$regionSouth
                                                -0.0291771 0.0030090
## df$regionWest
                                                -0.0186929
                                                            0.0030768
## df$flavor_descrAMERICONE DREAM
                                                -0.0253094 0.0081810
## df$flavor_descrBANANA SPLIT
                                                -0.0413752 0.0088281
## df$flavor_descrBLACK & TAN
                                                -0.0821192
                                                            0.0300296
                                                            0.0137503
## df$flavor_descrBROWNIE BATTER
                                                 0.0012591
## df$flavor_descrBUTTER PECAN
                                                -0.0091748 0.0114414
## df$flavor_descrCAKE BATTER
                                                -0.0377682
                                                            0.0097194
## df$flavor_descrCHC
                                                -0.0099550
                                                            0.0163807
## df$flavor_descrCHC ALMOND NOUGAT
                                                -0.0165259
                                                            0.0149528
## df$flavor descrCHC CHIP C-DH
                                                -0.0215843
                                                            0.0079080
## df$flavor_descrCHC FUDGE BROWNIE
                                                -0.0240585
                                                            0.0077286
## df$flavor descrCHERRY GRCA
                                                -0.0295611
                                                            0.0072415
## df$flavor_descrCHUBBY HUBBY
                                                -0.0070860 0.0104715
## df$flavor descrCHUNKY MONKEY
                                                -0.0346901 0.0078888
## df$flavor_descrCINNAMON BUNS
                                                -0.0440753 0.0087787
## df$flavor descrCOFFEE
                                                0.0329934
                                                            0.0206283
## df$flavor descrCREME BRULEE
                                                -0.0463964 0.0094508
## df$flavor descrDOUBLE CHC FUDGE SWR
                                                -0.0019933 0.1464400
## df$flavor_descrDUBLIN MUDSLIDE
                                                -0.0096791
                                                            0.0100008
## df$flavor_descrFOSSIL FUEL
                                                -0.0444052
                                                            0.0172219
## df$flavor_descrHALF BAKED
                                                -0.0331071 0.0085186
## df$flavor_descrHEATH CANDY EVERYTHING BUT THE -0.0321705
                                                            0.0090983
## df$flavor_descrHEATH COFFEE CRUNCH
                                                -0.0180328
                                                            0.0078682
## df$flavor_descrHEATH CRUNCH
                                                 0.0019163
                                                            0.0092399
## df$flavor_descrIMAGINE WHIRLED PEACE
                                                -0.0384130
                                                            0.0087794
## df$flavor_descrKARAMEL SUTRA
                                                            0.0084280
                                                -0.0299031
## df$flavor descrMAGIC BROWNIES
                                                -0.0377870
                                                            0.0122285
## df$flavor_descrMINT CHC CHUNK
                                                 0.0143387 0.0137753
## df$flavor descrNEAPOLITAN DYNAMITE
                                                -0.0209003 0.0124746
## df$flavor_descrNEW YORK SUPER FUDGE CHUNK
                                                -0.0303131 0.0080667
## df$flavor descrOATMEAL COOKIE CHUNK
                                                 -0.0171967
                                                            0.0125887
## df$flavor_descrONE CSK BROWNIE
                                                -0.0536542 0.0089962
## df$flavor descrOXFORD MINT CHC COOKIE
                                                -0.0219443 0.0103730
## df$flavor descrPB CUP
                                                -0.0250801 0.0082367
## df$flavor descrPB TRUFFLE
                                                -0.0592422 0.1464715
## df$flavor_descrPHISH FOOD
                                                -0.0167184 0.0080076
## df$flavor_descrPISTACHIO PISTACHIO
                                                -0.0231394
                                                            0.0084636
## df$flavor_descrPUMPKIN CSK
                                                -0.0968576
                                                            0.0138814
## df$flavor_descrRSP CHC CHUNK
                                                 0.0038521
                                                            0.0176994
## df$flavor_descrSMORES
                                                 0.0125424 0.0122296
## df$flavor_descrSTR
                                                 0.0467395
                                                            0.0445880
## df$flavor_descrSTR CSK
                                                -0.0400392
                                                            0.0091651
## df$flavor_descrSTRAWBERRIES & CREAM
                                                -0.0159223
                                                            0.0411035
## df$flavor descrSWEET CREAM & COOKIES
                                                0.0245899 0.0361161
## df$flavor_descrTRIPLE CARAMEL CHUNK
                                                -0.0306980 0.0169952
## df$flavor descrTURTLE SOUP
                                                -0.0474605 0.0121735
```

```
## df$flavor descrVAN CARAMEL FUDGE
                                                -0.0366666 0.0107791
## df$flavor_descrVERMONTY PYTHON
                                                -0.0165085 0.0142164
## df$flavor descrW-N-C-P-C
                                                -0.0311996 0.0085329
## df$flavor_descrWHITE RUSSIAN
                                                 0.1854566 0.1464198
## df$usecoupTRUE
                                                -0.0424861
                                                            0.0048388
## df$household composition2
                                                0.0033760 0.0040415
## df$household composition3
                                                0.0182581 0.0051752
## df$household_composition5
                                                0.0111256 0.0035981
## df$household_composition6
                                                -0.0058366
                                                            0.0136663
## df$household_composition7
                                                 0.0245232 0.0044055
## df$household_composition8
                                                 0.0134900
                                                            0.0052645
## df$household_income
                                                 0.0020595
                                                            0.0001976
## df$microwaveTRUE
                                                -0.0376274
                                                            0.0074918
## df$sfhTRUE
                                                -0.0092787
                                                            0.0024808
## df$raceblack
                                                 0.0129380 0.0041439
## df$raceasian
                                                -0.0023031
                                                            0.0063807
## df$raceother
                                                 0.0157437
                                                            0.0052293
## df$household size
                                                -0.0036294 0.0009670
## df$tvcableTRUE
                                                 0.0050934 0.0021384
## df$couponper1:df$regionCentral
                                                 0.0185065 0.0054423
## df$couponper1:df$regionSouth
                                               -0.0015877 0.0060142
## df$couponper1:df$regionWest
                                                0.0005589 0.0060718
## df$couponper1:df$raceblack
                                                0.0108166 0.0069323
## df$couponper1:df$raceasian
                                                0.0239380 0.0098276
## df$couponper1:df$raceother
                                                -0.0279818 0.0132650
                                                t value Pr(>|t|)
## (Intercept)
                                                135.742 < 2e-16 ***
## df$size1_descr32.0 MLOZ
                                                 37.533 < 2e-16 ***
## df$couponper1
                                                11.801 < 2e-16 ***
## df$haspromoTRUE
                                                -16.127 < 2e-16 ***
## df$regionCentral
                                                 -8.171 3.21e-16 ***
## df$regionSouth
                                                 -9.697 < 2e-16 ***
## df$regionWest
                                                -6.075 1.26e-09 ***
## df$flavor_descrAMERICONE DREAM
                                                -3.094 0.001979 **
## df$flavor descrBANANA SPLIT
                                                -4.687 2.79e-06 ***
## df$flavor descrBLACK & TAN
                                               -2.735 0.006250 **
## df$flavor descrBROWNIE BATTER
                                                0.092 0.927039
## df$flavor_descrBUTTER PECAN
                                               -0.802 0.422619
## df$flavor descrCAKE BATTER
                                                -3.886 0.000102 ***
## df$flavor_descrCHC
                                                -0.608 0.543374
## df$flavor descrCHC ALMOND NOUGAT
                                                -1.105 0.269083
## df$flavor descrCHC CHIP C-DH
                                                -2.729 0.006350 **
## df$flavor descrCHC FUDGE BROWNIE
                                                -3.113 0.001855 **
## df$flavor_descrCHERRY GRCA
                                                -4.082 4.48e-05 ***
## df$flavor_descrCHUBBY HUBBY
                                                -0.677 0.498612
## df$flavor_descrCHUNKY MONKEY
                                                -4.397 1.10e-05 ***
                                                -5.021 5.19e-07 ***
## df$flavor_descrCINNAMON BUNS
## df$flavor_descrCOFFEE
                                                 1.599 0.109741
## df$flavor_descrCREME BRULEE
                                                -4.909 9.21e-07 ***
## df$flavor_descrDOUBLE CHC FUDGE SWR
                                                -0.014 0.989140
## df$flavor_descrDUBLIN MUDSLIDE
                                                -0.968 0.333142
## df$flavor_descrFOSSIL FUEL
                                                -2.578 0.009932 **
                                         -3.886 0.000102 ***
## df$flavor descrHALF BAKED
## df$flavor_descrHEATH CANDY EVERYTHING BUT THE -3.536 0.000407 ***
```

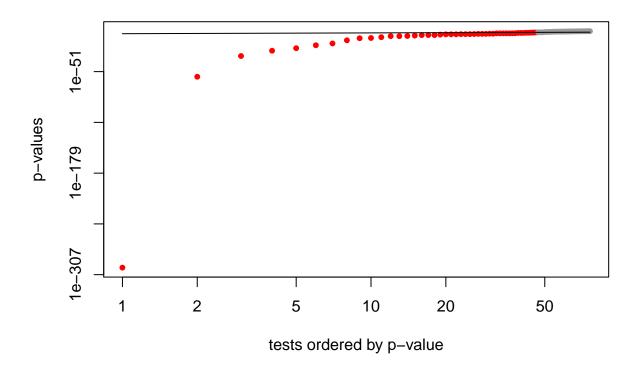
```
-2.292 0.021923 *
## df$flavor descrHEATH COFFEE CRUNCH
## df$flavor_descrHEATH CRUNCH
                                                 0.207 0.835702
## df$flavor descrIMAGINE WHIRLED PEACE
                                                -4.375 1.22e-05 ***
## df$flavor_descrKARAMEL SUTRA
                                                 -3.548 0.000389 ***
                                                -3.090 0.002004 **
## df$flavor descrMAGIC BROWNIES
## df$flavor descrMINT CHC CHUNK
                                                 1.041 0.297934
                                             -1.675 0.093864 .
-3.758 0.000172 ***
## df$flavor descrNEAPOLITAN DYNAMITE
## df$flavor descrNEW YORK SUPER FUDGE CHUNK
## df$flavor descrOATMEAL COOKIE CHUNK
                                                 -1.366 0.171941
## df$flavor_descrONE CSK BROWNIE
                                                 -5.964 2.50e-09 ***
## df$flavor_descrOXFORD MINT CHC COOKIE
                                                 -2.116 0.034397 *
## df$flavor_descrPB CUP
                                                 -3.045 0.002330 **
## df$flavor_descrPB TRUFFLE
                                                 -0.404 0.685877
## df$flavor_descrPHISH FOOD
                                                -2.088 0.036827 *
                                               -2.734 0.006262 **
## df$flavor_descrPISTACHIO PISTACHIO
## df$flavor_descrPUMPKIN CSK
                                                 -6.977 3.09e-12 ***
## df$flavor_descrRSP CHC CHUNK
                                                 0.218 0.827712
## df$flavor descrSMORES
                                                 1.026 0.305101
## df$flavor_descrSTR
                                                 1.048 0.294533
## df$flavor descrSTR CSK
                                                 -4.369 1.26e-05 ***
## df$flavor_descrSTRAWBERRIES & CREAM
                                                -0.387 0.698486
## df$flavor descrSWEET CREAM & COOKIES
                                                 0.681 0.495970
## df$flavor_descrTRIPLE CARAMEL CHUNK
                                                -1.806 0.070889 .
## df$flavor descrTURTLE SOUP
                                                 -3.899 9.70e-05 ***
## df$flavor descrVAN CARAMEL FUDGE
                                                 -3.402 0.000671 ***
## df$flavor descrVERMONTY PYTHON
                                                 -1.161 0.245563
## df$flavor_descrW-N-C-P-C
                                                 -3.656 0.000256 ***
## df$flavor_descrWHITE RUSSIAN
                                                  1.267 0.205309
## df$usecoupTRUE
                                                 -8.780 < 2e-16 ***
## df$household_composition2
                                                  0.835 0.403532
## df$household_composition3
                                                  3.528 0.000420 ***
## df$household_composition5
                                                  3.092 0.001990 **
## df$household_composition6
                                                 -0.427 0.669324
## df$household_composition7
                                                  5.567 2.63e-08 ***
## df$household_composition8
                                                  2.562 0.010401 *
## df$household income
                                                 10.422 < 2e-16 ***
## df$microwaveTRUE
                                                 -5.022 5.14e-07 ***
## df$sfhTRUE
                                                  -3.740 0.000184 ***
## df$raceblack
                                                   3.122 0.001798 **
## df$raceasian
                                                  -0.361 0.718140
## df$raceother
                                                  3.011 0.002610 **
## df$household size
                                                 -3.753 0.000175 ***
## df$tvcableTRUE
                                                  2.382 0.017235 *
## df$couponper1:df$regionCentral
                                                  3.400 0.000674 ***
## df$couponper1:df$regionSouth
                                                 -0.264 0.791792
## df$couponper1:df$regionWest
                                                  0.092 0.926659
## df$couponper1:df$raceblack
                                                  1.560 0.118701
## df$couponper1:df$raceasian
                                                  2.436 0.014867 *
## df$couponper1:df$raceother
                                                 -2.109 0.034918 *
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## (Dispersion parameter for gaussian family taken to be 0.02138715)
##
```

FDR = 0.1



```
## [1] 0.03682681
fdr(pvals, 0.05, plotit=TRUE)
```

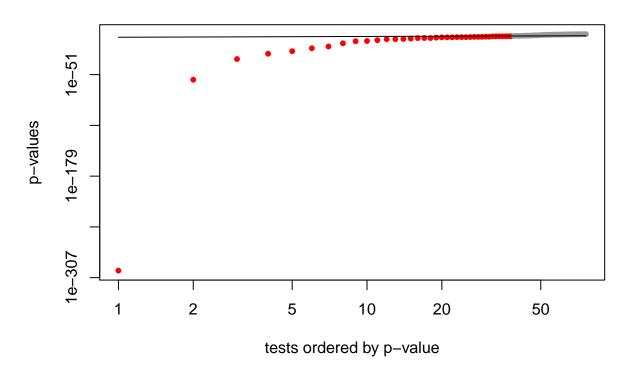
FDR = 0.05



[1] 0.021923

fdr(pvals, 0.01, plotit=TRUE)

FDR = 0.01



[1] 0.00260965