Dylan Smith

1. Each coefficient uses the parameter estimate to tell for each race the when they are converted into the dummy variables of 0 and 1, the change when each is found true leaving the other variables as a constant.

(4.13)

1. The individual t-test shows only Black as significant with a p value of <.0001. The other two (Hispanic and Other) have a .7308 and .8247 p value respectively.
2. The R^2 is .0194.
3. The ANVOVA table shoes a p value of <.0001 and a test statistic of 9.53.

2)

A)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Source | DF | SS | MS | F |
| Texture | 4 | 1489 | 372.25 | 2.297 |
| Error | 195 | 31605 | 162.08 |  |
| Total | 199 | 33094 |  |  |

B) It tells the SS for texture divided by textures degrees of freedom

C) .0605=p-value

D) Hypothesis:

H0: U1=U2=U3=U4

H1: U1≠U2≠U3≠U4

The data shows no significance; therefore, the hypothesis should not be rejected.

3)

A) Because an ANOVA will give the differences between each group showing interaction between all variables.

B) based just on the ANOVA findings, it seems as if both variables are significant based off of the given P-value for the model and for each variable respectively.

C) Tukeys test suggests that each group is significant due to there being no overlap in lines shown by test.

4)

A) The unpopped mean for Orville is 17.83, for Seaway the mean is 33.33, and for the mean for the entire sample is 3.5. The effect for Orville is 14.33 and for Seaway it is 29.83.

B) It seems as if all conditions have been met. The residual vs Quantile shows a mostly uniform pattern and the residual vs predicted value shows seemingly random noise.

C) Both Brand and model are significant and make a difference to the unpopped kernels. It appeared at first that only Brand was significant with Trial having a .1 P-Value. After closer inspection and using the tukey test it was found that in fact both variables are significant.