Linear and Logistic Regression

## 1. Add on to the regression equation that you created in exercise 1 by

## generating an interaction term and testing the interaction.

sat.metrobydensity <- lm(energy ~ metro\*density,

data=states.data)

coef(summary(sat.metrobydensity))

## 2. Try adding region to the model. Are there significant differences

## across the four regions?

ModelC<- lm(energy ~ region, data=states.data)

coef(summary(ModelC))

anova(ModelC)

contrasts(states.data$region)

coef(summary(lm(energy ~ C(region, base=4),

data=states.data)))

coef(summary(lm(energy ~ C(region, contr.helmert),

data=states.data)))