1.

a. y = mx + b
b. 36130
c. 196
d. It adjust due to st dev
e. Very useful
f. very significant

2.

```
#Require packages
require(mosaic)
require(MASS)
require(openintro)

#Read in the Gradrate data set
GradRate11<-
read.csv("http://www.math.usu.edu/cfairbourn/Stat2300/RStudioFiles/data/GradRate11.
csv")

#Force results NOT to report in scientific notation
options(scipen = 8)

#Create the model with all 10 independent variables.
res = lm(GradRate ~ Women + Age + FullFaculty + Ratio +
         MinGradRate + Pell + Minority + MedianSAT +
         TotalPrice + Size, data = GradRate11)

#Look at the results
summary(res)

#Remove variables from the model until all variables are significant (p-value<.05)
#and you have the largest Adjusted R-squared, the smallest Residual standard error,
#and the largest F-statistic. (You may have to settle for the best 2 out of 3.)

#Plot the residuals vs. fitted values
plot(res$residuals,res$fitted, main="Residuals vs. Fitted Values")
```