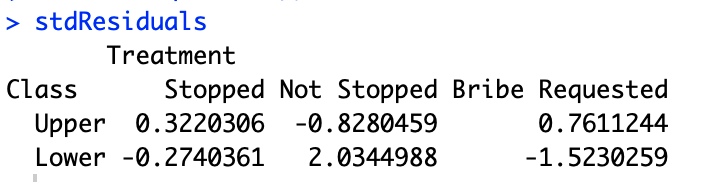
Andrew Celli

PS4

Problem 1

1. 3.7912
2. Cannot reject null
3. 
4. It shows us that the largest (absolute and relative) deviations are in the lower class not stopped and bribe requests.

#PROBLEM 1 ---------

FOs = matrix( data = c(14,6,7,7,7,1), nrow = 2, byrow = TRUE)

dimnames(prob1data) <- list(Class=c("Upper", "Lower"),

Treatment=c("Stopped", "Not Stopped", "Bribe Requested"))

prob1data

FEs =

matrix(data = c((27/42)\*21 , (27/42)\*13, (27/42)\*8,

(15/42)\*21, (15/42)\*13, (15/42)\*8), nrow = 2)

X2 = sum((((FOs-FEs)^2)/FEs))

chisq.test(prob1data)

chisq.test(FOs)

pchisq(X2, df = 2, lower.tail = FALSE)

rowprop = matrix(data = c(27/42, 27/42, 27/42, 15/42, 15/42, 15/42), nrow =2, byrow = TRUE)

colprop = matrix(data = c(21/42, 13/42, 8/42, 21/42, 13/42, 8/42), nrow =2, byrow = TRUE)

stdResiduals = matrix(

data = c((FOs - FEs)/(sqrt(FEs\*(1-rowprop)\*(1-colprop))))

, byrow = TRUE, nrow = 2)

dimnames(stdResiduals) <- list(Class=c("Upper", "Lower"),

Treatment=c("Stopped", "Not Stopped", "Bribe Requested"))

stdResiduals