CODE:

#Create vectors x,y,z with the identified values.

x<-c(5,10,15,20,25,30)

y<-c(-1,NA,75,3,5,8)

z<-c(5)

#Multiply x & y by z and store as new objects.

group1=c(x\*z)

group2=c(y\*z)

#Print the new vectors.

print(group1)

print(group2)

#Replace missing element in y with 2.5

y<-ifelse(test = is.na(y)==T, yes = 2.5, no = y)

#Print y with new value.

print(y)

#Load data set and print first ten state abbreviations

tbl<-read.csv("https://raw.githubusercontent.com/mattdemography/EDU\_7043/master/Data/Assignment\_1.csv")

tbl[1:10,1]

#Find the mean murder rate in the US

mean(tbl[1:50, 3])

#Find median murder rate in the US

median(tbl[1:50, 3])

#create copy of tbl to work from

df = tbl

#create subset of df for New England

subdf = subset(df,State=="CT" | State=="MA" | State== "ME" | State=="NH" | State=="RI" | State=="VT")

#Find mean murder rate in New England

mean(subdf[1:6, 3])

#Bonus: Find mean violent crime rate in US

df<-ifelse(test = is.na(df$Vcrime)==T, yes = 555, no = df$Vcrime)

mean(df)

ANSWERS:

> #Create vectors x,y,z with the identified values.

> x<-c(5,10,15,20,25,30)

> y<-c(-1,NA,75,3,5,8)

> z<-c(5)

> #Multiply x & y by z and store as new objects.

> group1=c(x\*z)

> group2=c(y\*z)

> #Print the new vectors.

> print(group1)

[1] 25 50 75 100 125 150

> print(group2)

[1] -5 NA 375 15 25 40

> #Replace missing element in y with 2.5

> y<-ifelse(test = is.na(y)==T, yes = 2.5, no = y)

> #Print y with new value.

> print(y)

[1] -1.0 2.5 75.0 3.0 5.0 8.0

> #Load data set and print first ten state abbreviations

> tbl<-read.csv("https://raw.githubusercontent.com/mattdemography/EDU\_7043/master/Data/Assignment\_1.csv")

> tbl[1:10,1]

[1] AK AL AR AZ CA CO CT DE FL GA

51 Levels: AK AL AR AZ CA CO CT DC DE FL GA HI IA ID IL IN KS KY LA MA MD ME MI MN MO MS MT NC ND ... WY

> #Find the mean murder rate in the US

> mean(tbl[1:50, 3])

[1] 7.332

> #Find median murder rate in the US

> median(tbl[1:50, 3])

[1] 6.7

> #create copy of tbl to work from

> df = tbl

> #create subset of df for New England

> subdf = subset(df,State=="CT" | State=="MA" | State== "ME" | State=="NH" | State=="RI" | State=="VT")

> #Find mean murder rate in New England

> mean(subdf[1:6, 3])

[1] 3.55

> #Bonus: Find mean violent crime rate in US

> df<-ifelse(test = is.na(df$Vcrime)==T, yes = 555, no = df$Vcrime)

> mean(df)

[1] 25.21569