**1)** Create the vectors ‘x’, ‘y’ and ‘z’, with values shown below in order.

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

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

5: z<-c(5)

**2)** Multiply the first two vectors by the z vector, and store these in new objects. Print these new vectors: unicorn=c(x\*z); lollipops=c(y\*z); print(unicorn); print(lollipop)

**3)** Replace the missing element of the y vector with the value 2.5, using the ifelse() function and print the vector: y<-ifelse(test=is.na(y)==T,yes=(2.5), no=y); print(y)

**4)** Load the dataset ‘Assignment\_1.csv’ from the github source shown in class. You may import this however you please. If using the online source, the website is: Class1<-read.csv("https://raw.githubusercontent.com/mattdemography/EDU\_7043/master/Data/Assignment\_1.csv")"https://raw.githubusercontent.com/mattdemography/EDU\_7043/master/Data/Assignment\_1.csv"

Answer the following questions:

* Print the first 10 state abbreviations:
* Central Tendencies:
  + What is the mean murder rate in the U.S. given these data?: mean(Class1[1:51,3])
  + What is the median murder rate?: median(Class1[1:51,3])
  + What is the mean murder rate in New England?: subcopydata=subset(cd, State=="CT"|State=="MA"|State=="ME"|State=="NH"|State=="RI"|State=="VT")
    - Hint: Look here: https://en.wikipedia.org/wiki/New\_England
  + Bonus: What is the mean Vcrime rate in the U.S.?: d<-ifelse(test=is.na(cd$Vcrime)==T, yes=555, no=cd$Vcrime)
  + mean(cd)
  + mean(copydata$Vcrime, na.rm = T)

**What to turn in**

* Publish your homework to GitHub under your user account, the appropriate format (check syllabus for instructions).
* Upload the code you used to GitHub.
* Provide me the links of these two files via e-mail no later than Thursday, September 6th at 6:00pm.