HOMEWORK on VECTORS

p. 296 (20.3.5) #1 & 2

1. (1/2 pt) Describe the difference between is.finite(x) and !is.infinite(x).
2. (1/2 pt) Read the source code for dplyr::near() (Hint: to see the source code, drop the ()). How does it work?

p. 302 (20.4.6) # 4, 5, & 6

(4 pts. On each item, ½ pt for correct coding, ½ pt for test) Create functions that take a vector as input and returns:

1. The last value. Should you use [ or [[?
2. The elements at even numbered positions.
3. Every element except the last value.
4. Only even numbers (and no missing values).
5. (1 pt) Why is x[-which(x > 0)] not the same as x[x <= 0]?
6. (1 pt) What happens when you subset with a positive integer that’s bigger than the length of the vector? What happens when you subset with a name that doesn’t exist?

List subsetting:

1. (3 pts) z <- list(a=c(2,4,6), b = "a rather long string", c = pi, d = list(1,2,3))

Write commands to do each of the following:

Return the number pi

Return the number 3

Return the vector 2,4,6