1. a No

b No

2. Recycling of Vector means when applying an operation to two vectors that requires them to be the same length, R automatically recycles or repeats, elements of the shorter one, until it is long enough to match the longer Vector

3. Suppose we have two Vectors c(1,2,4) and c(6,0,9,10,13) where the first one is shorter with only 3 elements. Now if we sum these two, we will get a warning message as follows.  
> c(1,2,4) + c(6,0,9,10,13)  
[1]  7  2 13 11 15  
Warning message:  
In c(1, 2, 4) + c(6, 0, 9, 10, 13) :  longer object length is not a multiple of shorter object length  
  
Here R , Sum those Vectors by Recycling or repeating the elements in shorter one, until it is long enough to match the longer one as follows..  
  
> c(1,2,4,1,2) + c(6,0,9,10,13)  
[1]  7  2 13 11 15