Exercises-1: Intro to R - NAs

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1. If `X <- c (22,3,7,NA,NA,67)`, what will be the output for the R statement `length(X)`?
2. If `X = c(NA,3,14,NA,33,17,NA,41)` write some R code that will remove all occurrences of `NA` in `X`.

a. `X[!is.na(X)]`
b. `X[is.na(X)]`
c. `X[X==NA]= 0`

3. If `Y = c(1,3,12,NA,33,7,NA,21)`, what R statement will replace all occurrences of `NA` with 11?

a. `Y[Y==NA]= 11`
b. `Y[is.na(Y)]= 11`
c. `Y[Y==11] = NA`

4. If `X = c(34,33,65,37,89,NA,43,NA,11,NA,23,NA)` then what will count the number of occurrences of `NA` in `X`?

a. `sum(X==NA)`
b. `sum(X == NA, is.na(X))`
c. `sum(is.na(X))`

5. Consider the following vector `W <- c (11, 3, 5, NA, 6)`. Write some R code that will return `TRUE` for value of `W` missing in the vector.
6. Load 'Orange' dataset from R using the command `data(Orange)`. Replace all values of `age=118` to `NA`.
7. Consider the following vector `A <- c (33, 21, 12, NA, 7, 8)`. Write some R code that will calculate the mean of `A` without the missing value.
8. Let

```
c1 <- c(1,2,3,NA)
c2 <- c(2,4,6,89)
c3 <- c(45,NA,66,101)
```

If `X <- rbind(c1,c2,c3, deparse.level=1)`, write a code that will display all rows with missing values.

9. Consider the following data obtained from

```
df <- data.frame(
Name = c(NA, "Joseph", "Martin", NA, "Andrea"),
Sales = c(15, 18, 21, 56, 60),
Price = c(34, 52, 21, 44, 20),
stringsAsFactors = FALSE)
```

Write some R code that will return a data frame which removes all rows with `NA` values in `Name` column.

10. Consider the following data obtained from

```
df <- data.frame(
Name = c(NA, "Joseph", "Martin", NA, "Andrea"),
Sales = c(15, 18, 21, NA, 60),
Price = c(34, 52, 33, 44, NA),
stringsAsFactors = FALSE)
```

Write some R code that will remove all rows with `NA` values and give the following output.
[https://www.r-exercises.com/2015/11/25/logical-vectors-and-operators/]