Assignment 1

1. What is the correct command to install the package `splines` in R console ?

2. The correct command to load the library `MASS` in R console is

3. The output of the R command `c(1,2,3,4)^c(1,2)` is

4. The output of the R command `(c(1,3,3,2)**c(3,1,1,3))^c(2,1,2,1)+c(4,3,2,1)` is

5. If the output of the R command `min(c(4,-2,3,-1))**max(c(?,1,-3,-1))` is `4` then the digit in place of `?` should be

6. The output of the R command `(min(c(5,4,3,1))-max(c(-4,-2,0.75,-1)))**c(-1,-2,-0.5)` is

7. The output of the R command `sqrt(abs(c(4,-9,16,-36)))-abs(sqrt(c(4,-9,16,-36)))` is

8. If the output of the R command `sqrt(c(36,16,9,4)) - abs(c(-6,-3,4,2))/ sqrt(c(36,9,16,4)) - max(c(2,5,-1,?))` is `0 -2 -3 -4` then the digit in place of `?` should be

9. If x is a matrix specified by the R command `x = matrix(nrow=2, ncol=2,data=c(-1,2,-3,4))` then the output of R command `t(x)` is

10. If x is a matrix specified by the R command `x = matrix(nrow=3, ncol=3,data=c(1,8,2,1,5,4,3,9,6), byrow=TRUE)`, then the output of the R command `x%%t(x)` is

11. If x is a matrix specified by the R command `x = matrix(nrow=3, ncol=3,data=9:1, byrow=T)`, then the outputs of the R commands `x[2:3,2:3]` and `x[1,]` are

12. The outcome of the following set of commands is `x = matrix(nrow=2,ncol=4, data=18:11)`

```
y = 3*x-10

y[2,4]
```

13. The output of the R command c(1,3,2,2)^c(2,3,2) is

14. The output of the R command c(3,4,5,6,7)**c(2,3) - (c(1,2,3,4,5)^c(3,1)) is

15. If the output of the R command (5/2*c(4,4,6,?,6))**2 is 100 100 225 25 225 then the digit in place of ? is