

Problema 1

A) es una interfaz fácil de manejar y la manipulación de las herramientas es entendible

B) R versión 3.2.2

c) todas las versiones muchas veces no son compatibles entre ellas mismas

Problema 2

```
A=matrix(c(1,2,2,1,3,4),nrow=2, ncol=3); A

##      [,1] [,2] [,3]
## [1,]    1    2    3
## [2,]    2    1    4

B=matrix(c(1,2,3,0,1,2),nrow=3, ncol=2); B

##      [,1] [,2]
## [1,]    1    0
## [2,]    2    1
## [3,]    3    2

C=matrix(c(3,4,2,-1,1,1,3,5,3),nrow=3, ncol=3); C

##      [,1] [,2] [,3]
## [1,]    3   -1    3
## [2,]    4    1    5
## [3,]    2    1    3

D=matrix(c(3,2,-2,4),nrow=2, ncol=2); D

##      [,1] [,2]
## [1,]    3   -2
## [2,]    2    4

E=matrix(c(2,0,3,-4,1,2,5,4,1),nrow=3, ncol=3); E

##      [,1] [,2] [,3]
## [1,]    2   -4    5
## [2,]    0    1    4
## [3,]    3    2    1

F=matrix(c(-4,2,5,3),nrow=2, ncol=2); F

##      [,1] [,2]
## [1,]   -4    5
## [2,]    2    3

O=matrix(c(0,0,0,0,0,0,0,0,0),nrow=3, ncol=3); O

##      [,1] [,2] [,3]
## [1,]    0    0    0
## [2,]    0    0    0
## [3,]    0    0    0
```

E+C

```
##      [,1] [,2] [,3]
## [1,]    5  -5    8
## [2,]    4    2    9
## [3,]    5    3    4
```

```
P <- (3*C)+(5*0); P
```

```
##      [,1] [,2] [,3]
## [1,]    9  -3    9
## [2,]   12    3   15
## [3,]    6    3    9
```

```
P <- (2*C)-(3*E); P
```

```
##      [,1] [,2] [,3]
## [1,]    0   10  -9
## [2,]    8   -1  -2
## [3,]   -5   -4    3
```

Problema 3

```
A=matrix(c(2,3,4,3,2,1,4,2,6,3,5),nrow=3, ncol=4); A
```

```
## Warning in matrix(c(2, 3, 4, 3, 2, 1, 4, 2, 6, 3, 5), nrow = 3,
## ncol = 4): la longitud de los datos [11] no es un submúltiplo o múltiplo
## del número de filas [3] en la matriz
```

```
##      [,1] [,2] [,3] [,4]
## [1,]    2    3    4    3
## [2,]    3    2    2    5
## [3,]    4    1    6    2
```

```
B=matrix(c(20,28,30,40,12,15,12,16,8,15,10,20),nrow=4, ncol=3); B
```

```
##      [,1] [,2] [,3]
## [1,]   20   12    8
## [2,]   28   15   15
## [3,]   30   12   10
## [4,]   40   16   20
```