Solution to practical part 7: Exercise on linear algebra

1. The matrices and vectors can be generated in R:

```
> A <- matrix(c(4,2,3,0,3,6),byrow=TRUE,nrow=2)
> B <- matrix(c(0,3,6,-1,-1,0),byrow=TRUE,nrow=2)
> x <- c(-1,2,-3)
> y <- c(5,3,-2)
```

a)
```
> 2*A
     [,1] [,2] [,3]
[1,]    8    4    6
[2,]    0    6   12
```

b)
```
> A + B
     [,1] [,2] [,3]
[1,]    4    5    9
[2,]   -1    2    6
```

c)
```
> A%*%t(B)
     [,1] [,2]
[1,]   24   -6
[2,]   45   -3
```