Week1_discussion

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```
A <- matrix(c(1,4,-3,6,3,0),2, byrow=T)
B <- matrix(c(3,2,1,-2,-6,5),2,byrow=T)
C <- matrix(c(2,4,4,0,-2,2),3, byrow=T)

alpha <- 4
Betta <- 1/2

# 1. A+B
a1 <- A + B
a1

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

# 2. A + C  No solution

# 3. Bt + C
a3 <- t(B)+C
a3

##      [,1] [,2]
## [1,]    5    2
## [2,]    6   -6
## [3,]   -1    7

# 4. A + Bt No Solution

# 5. Betta*C

a5 <- Betta * C
a5

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

# 6. 4A- 3B
a6 <- 4 *A - 3 *B
a6
```

```
##      [,1] [,2] [,3]
## [1,]   -5   10  -15
## [2,]   30   30  -15
```

```
# 7. At + alpha C
a7 <- t(A)+ alpha * C
a7
```

```
##      [,1] [,2]
## [1,]    9   22
## [2,]   20    3
## [3,]  -11    8
```

```
# 8. A+B-Ct
a8 <- A+B-t(C)
a8
```

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

```
# 9. 4A+2B-5Ct

a9 <- 4*A+2*B-5*t(C)
a9
```

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