Wooldridge

Matrices

```
library(Matrix)
A <- matrix( c(2,-4,-1,5,7,0), nrow=2)
B <- matrix( c(2,1,0,3,-1,5), nrow=2)
```

```
print(A)
```

```
     [,1] [,2] [,3]
[1,]    2   -1    7
[2,]   -4    5    0
```

```
print(B)
```

```
     [,1] [,2] [,3]
[1,]    2    0   -1
[2,]    1    3    5
```

```
A*B #Esto multiplica elemento por elemento
```

```
     [,1] [,2] [,3]
[1,]    4    0   -7
[2,]   -4   15    0
```

```
C <- t(B) #Transpongo
print(C)
```

```
     [,1] [,2]
[1,]    2    1
[2,]    0    3
[3,]   -1    5
```

```
D <- A %*% C #Multiplicación de matrices posta
```

```
solve(D) #Inversa
```

```
           [,1]       [,2]
[1,] 0.0460251 -0.1422594
[2,] 0.0334728 -0.0125523
```

```
det(D)
```

```
[1] 239
```

```
a <- c(1,3)
b <- c(3,9)
E <- cbind(a,b)
det(E)
```

```
[1] 0
```