## STAT 443: Assignment 2

Flora Zhang 52135365

14 Feb, 2022

## Question 1:

```
set.seed(123)
x <- arima.sim(n = 2000, list(ar = c(0.4, 0.25, -0.1)), sd = sqrt(1.96))
acf(x, lag=10) #sample acf
#adding the theoretical acf from b)
points(0,1, col="red")
points(1,0.48077, col="red")
points(2,0.3942, col="red")
points(3,0.17787, col="red")</pre>
```

## Series x

