## Comparison of acfs

## Comparison of artificial acfs

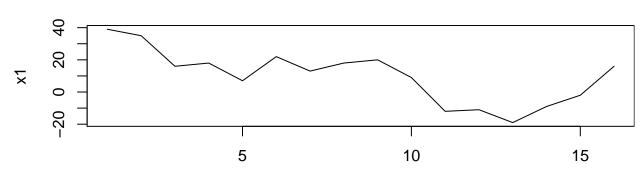
Consider the artificial series x1 and x2:

x1 <- c(39, 35, 16, 18, 7, 22, 13, 18, 20, 9, -12, -11, -19, -9, -2, 16) x2 <- c(47, -26, 42, -10, 27, -8, 16, 6, -1, 25, 11, 1, 25, 7, -5, 3)

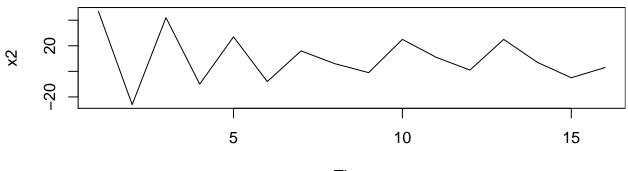
For each series:

• Plot the series.

```
par(mfrow = c(2,1), mar = c(5,4,1,0))
ts.plot(x1)
ts.plot(x2)
```



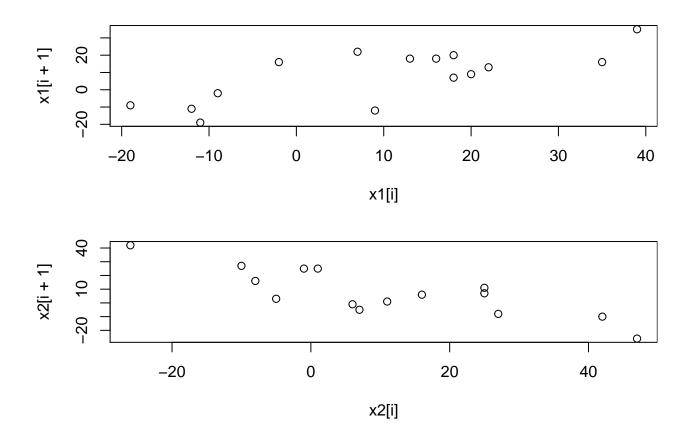
Time



Time

• Make a scatter plot of the series and its lag 1 values.

```
i <- 1:(length(x1)-1)
par(mfrow = c(2,1), mar = c(5,4,1,0))
plot(x1[i], x1[i+1])
plot(x2[i], x2[i+1])</pre>
```



• Plot the acf and comment.

par(mfrow = c(2,1), mar = c(5,4,1,0))
acf(x1)
acf(x2)

