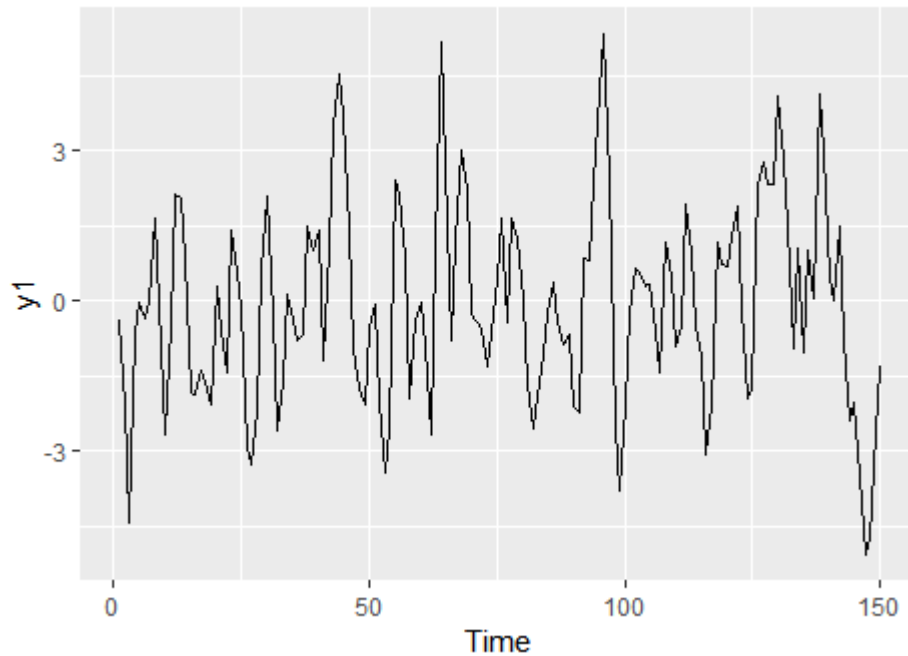# Argumentos de la función Arima

SERIE ESTACIONARIA COM MEDIA CERO

```
> set.seed(444)
> y1 = arima.sim(model=list(ar=c(0.8,-0.4)), n=150, sd = sigma)
> autoplot(y1)
```



```
> Arima(y1, order = c(2,0,0), include.constant = TRUE)$coef
        ar1          ar2    intercept
 0.80790688 -0.35640157 -0.05247746
> Arima(y1, order = c(2,0,0), include.constant = FALSE)$coef
       ar1          ar2
 0.8083604 -0.3565131
> Arima(y1, order = c(2,0,0), include.mean = TRUE)$coef
        ar1          ar2    intercept
 0.80790688 -0.35640157 -0.05247746
> Arima(y1, order = c(2,0,0), include.mean = FALSE)$coef
       ar1          ar2
 0.8083604 -0.3565131
> Arima(y1, order = c(2,0,0), include.drift = TRUE)$coef
        ar1          ar2    intercept         drift
 0.80639204 -0.35841117 -0.27862564   0.00299687
> Arima(y1, order = c(2,0,0), include.drift = FALSE)$coef
        ar1          ar2    intercept
 0.80790688 -0.35640157 -0.05247746
```

SERIE ESTACIONARIA COM MEDIA DISTINTA DE CERO

```
> set.seed(445)
> y2 = 10 + arima.sim(model=list(ar=c(0.8,-0.4)), n=150, sd = sigma)
> autoplot(y2)
```
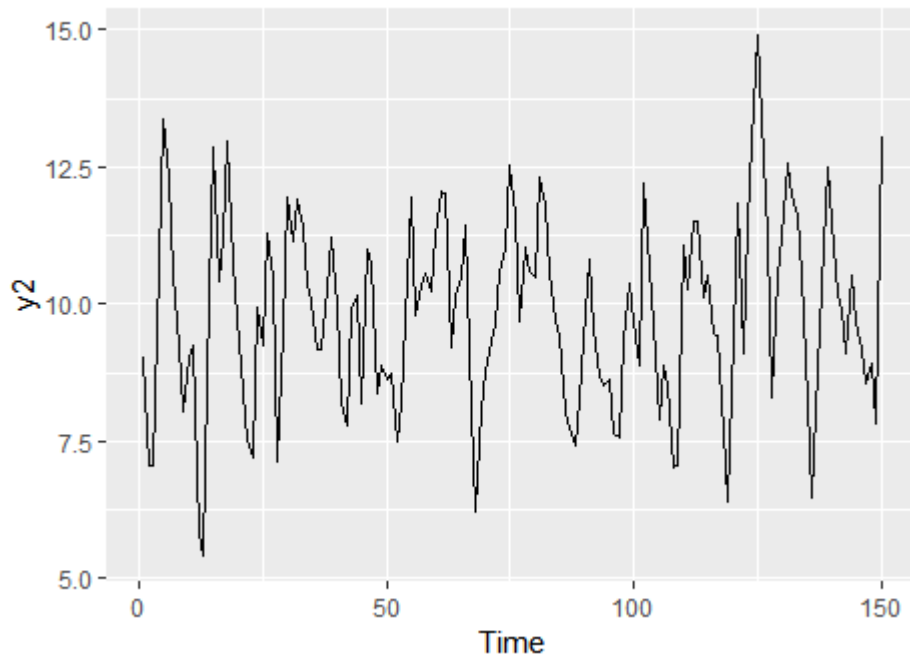


```
> Arima(y2, order = c(2,0,0), include.constant = TRUE)$coef
      ar1        ar2   intercept
 0.7138171 -0.2921810  9.8672658
> Arima(y2, order = c(2,0,0), include.constant = FALSE)$coef
       ar1         ar2
 0.99031610 -0.00261148
> Arima(y2, order = c(2,0,0), include.mean = TRUE)$coef
      ar1        ar2   intercept
 0.7138171 -0.2921810  9.8672658
> Arima(y2, order = c(2,0,0), include.mean = FALSE)$coef
       ar1         ar2
 0.99031610 -0.00261148
> Arima(y2, order = c(2,0,0), include.drift = TRUE)$coef
       ar1         ar2    intercept        drift
 0.71120324 -0.29438789  9.55630153  0.00411581
> Arima(y2, order = c(2,0,0), include.drift = FALSE)$coef
      ar1        ar2   intercept
 0.7138171 -0.2921810  9.8672658
```
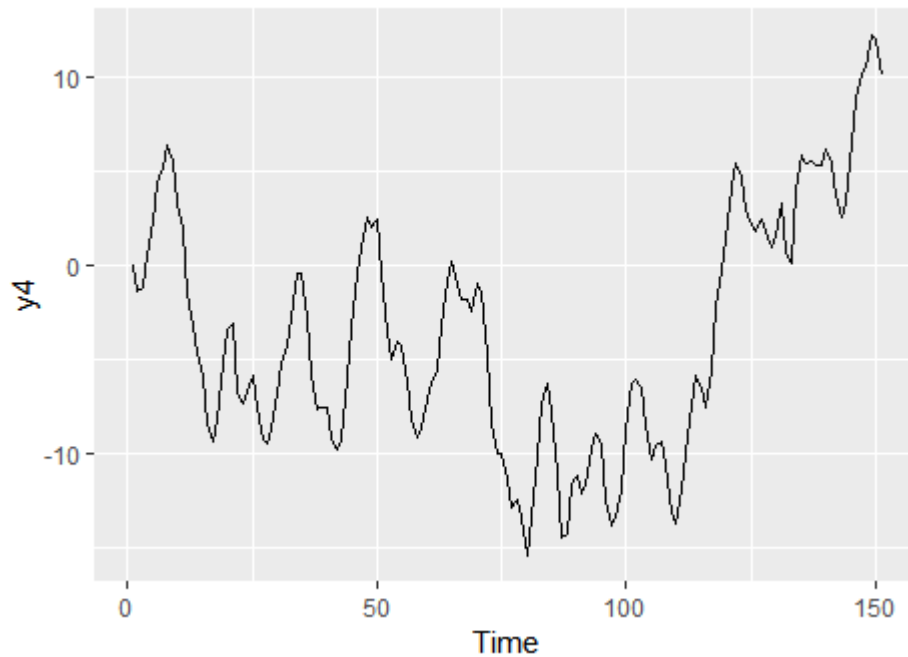
```
> set.seed(222)
> y3 = 10 + arima.sim(model=list(ar=c(0.8,-0.4)), n=150, sd = sigma) +
1:150
> autoplot(y3)
```
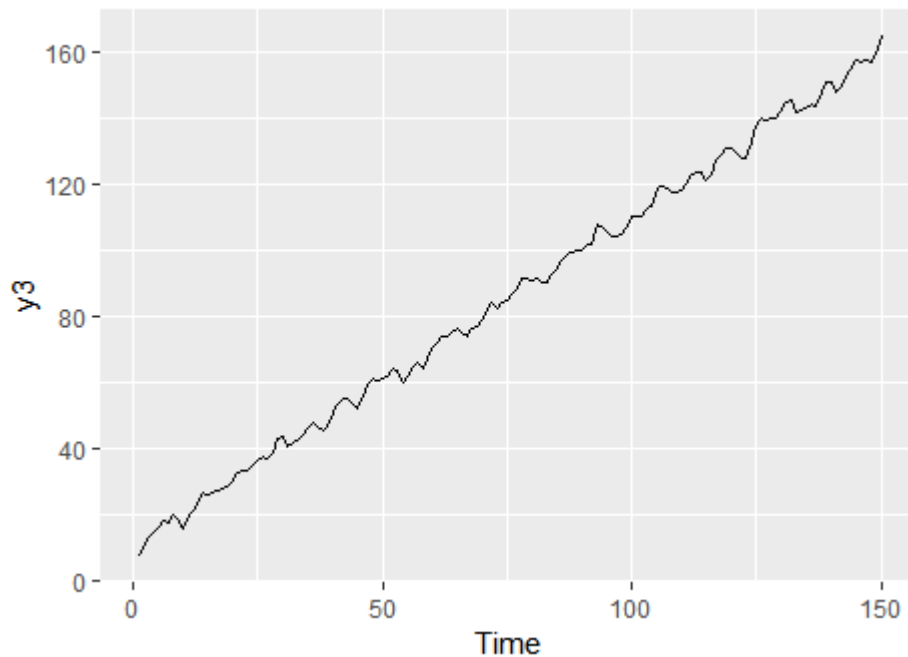


```
> Arima(y3, order = c(2,0,0), include.constant = TRUE)$coef
        ar1          ar2      intercept
 0.003740224  0.996258991 85.497274891
> Arima(y3, order = c(2,0,0), include.constant = FALSE)$coef
Error in stats::arima(x = x, order = order, seasonal = seasonal, inclu
de.mean = include.mean,   :
  non-stationary AR part from CSS
> Arima(y3, order = c(2,0,0), include.mean = TRUE)$coef
        ar1          ar2      intercept
 0.003740224  0.996258991 85.497274891
> Arima(y3, order = c(2,0,0), include.mean = FALSE)$coef
Error in stats::arima(x = x, order = order, seasonal = seasonal, inclu
de.mean = include.mean,   :
  non-stationary AR part from CSS
> Arima(y3, order = c(2,0,0), include.drift = TRUE)$coef
       ar1          ar2   intercept        drift
 0.8900932 -0.5022110   9.9209806    1.0024536
> Arima(y3, order = c(2,0,0), include.drift = FALSE)$coef
        ar1          ar2      intercept
 0.003740224  0.996258991 85.497274891
```

SERIE NO ESTACIONARIA

```
> set.seed(321)
> y4 = arima.sim(model=list(order = c(2,1,0), ar=c(0.8,-0.4)), n=150,
sd = sigma)
> autoplot(y4)
```



```
> Arima(y4, order = c(2,1,0), include.constant = TRUE)$coef
      ar1        ar2       drift
 0.7812815 -0.4077022  0.0543964
> Arima(y4, order = c(2,1,0), include.constant = FALSE)$coef
      ar1        ar2
 0.7819340 -0.4070671
> Arima(y4, order = c(2,1,0), include.mean  = TRUE)$coef
      ar1        ar2
 0.7819340 -0.4070671
> Arima(y4, order = c(2,1,0), include.mean = FALSE)$coef
      ar1        ar2
 0.7819340 -0.4070671
> Arima(y4, order = c(2,1,0), include.drift = TRUE)$coef
      ar1        ar2       drift
 0.7812815 -0.4077022  0.0543964
> Arima(y4, order = c(2,1,0), include.drift = FALSE)$coef
      ar1        ar2
 0.7819340 -0.4070671
```

```
> set.seed(502)
> y5 = 15 + arima.sim(model=list(order = c(2,1,0), ar=c(0.8,-0.4)), n=
150, sd = sigma)
> autoplot(y5)
```
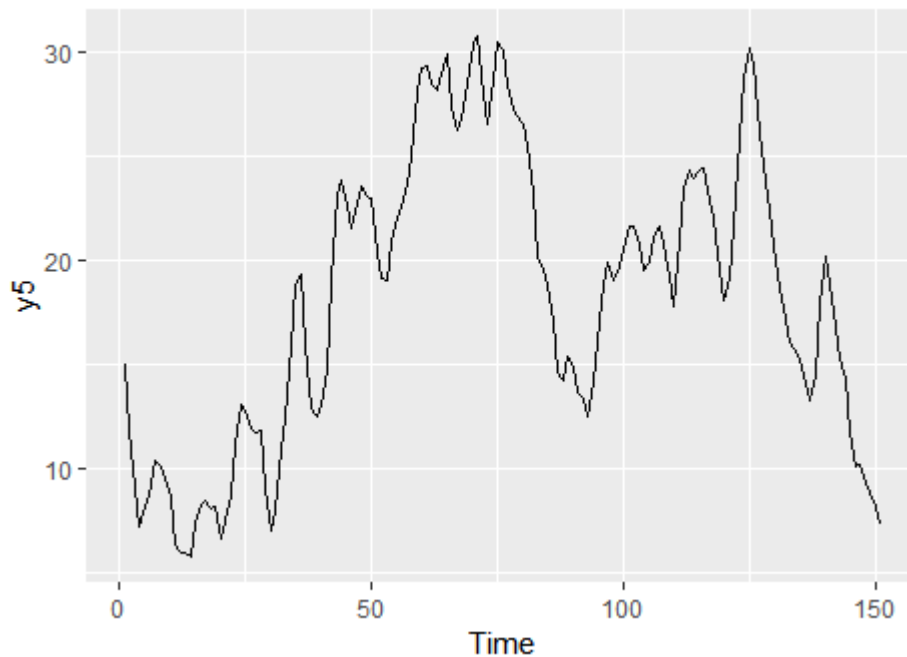


```
> Arima(y5, order = c(2,1,0), include.constant = TRUE)$coef
        ar1         ar2        drift
 0.81918928 -0.41240246 -0.05374074
> Arima(y5, order = c(2,1,0), include.constant = FALSE)$coef
       ar1        ar2
 0.8195883 -0.4126031
> Arima(y5, order = c(2,1,0), include.mean = TRUE)$coef
       ar1        ar2
 0.8195883 -0.4126031
> Arima(y5, order = c(2,1,0), include.mean = FALSE)$coef
       ar1        ar2
 0.8195883 -0.4126031
> Arima(y5, order = c(2,1,0), include.drift = TRUE)$coef
        ar1         ar2        drift
 0.81918928 -0.41240246 -0.05374074
> Arima(y5, order = c(2,1,0), include.drift = FALSE)$coef
       ar1        ar2
 0.8195883 -0.4126031
```

SERIE NO ESTACIONARIA

```
> set.seed(3214)
> y6 = 15 + arima.sim(model=list(order = c(2,2,0), ar=c(0.8,-0.4)), n=
150, sd = sigma)
> autoplot(y6)
```
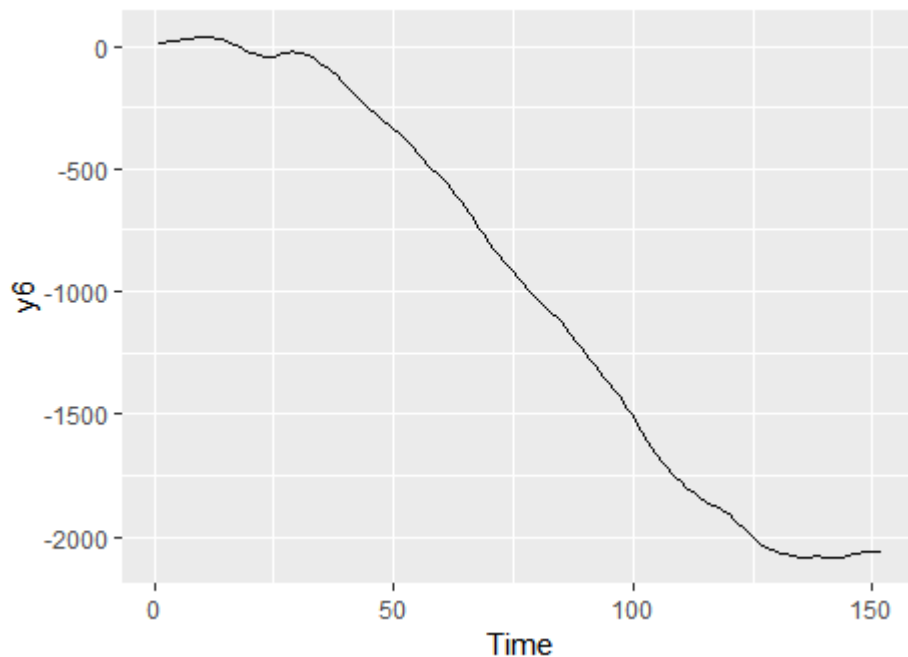


```
> Arima(y6, order = c(2,2,0), include.constant = TRUE)$coef
       ar1        ar2
 0.8328218 -0.3408569
> Arima(y6, order = c(2,2,0), include.constant = FALSE)$coef
       ar1        ar2
 0.8328218 -0.3408569
> Arima(y6, order = c(2,2,0), include.mean = TRUE)$coef
       ar1        ar2
 0.8328218 -0.3408569
> Arima(y6, order = c(2,2,0), include.mean = FALSE)$coef
       ar1        ar2
 0.8328218 -0.3408569
> Arima(y6, order = c(2,2,0), include.drift = TRUE)$coef
       ar1        ar2
 0.8328218 -0.3408569
Warning message:
In Arima(y6, order = c(2, 2, 0), include.drift = TRUE) :
  No drift term fitted as the order of difference is 2 or more.
> Arima(y6, order = c(2,2,0), include.drift = FALSE)$coef
       ar1        ar2
 0.8328218 -0.3408569
```