

NATALIA.R

rstudio-user

2019-12-30

```
#pregunta 1  
set.seed(123)  
normal<-rnorm(1000)  
head(data.frame(normal))#muestra normal estandar
```

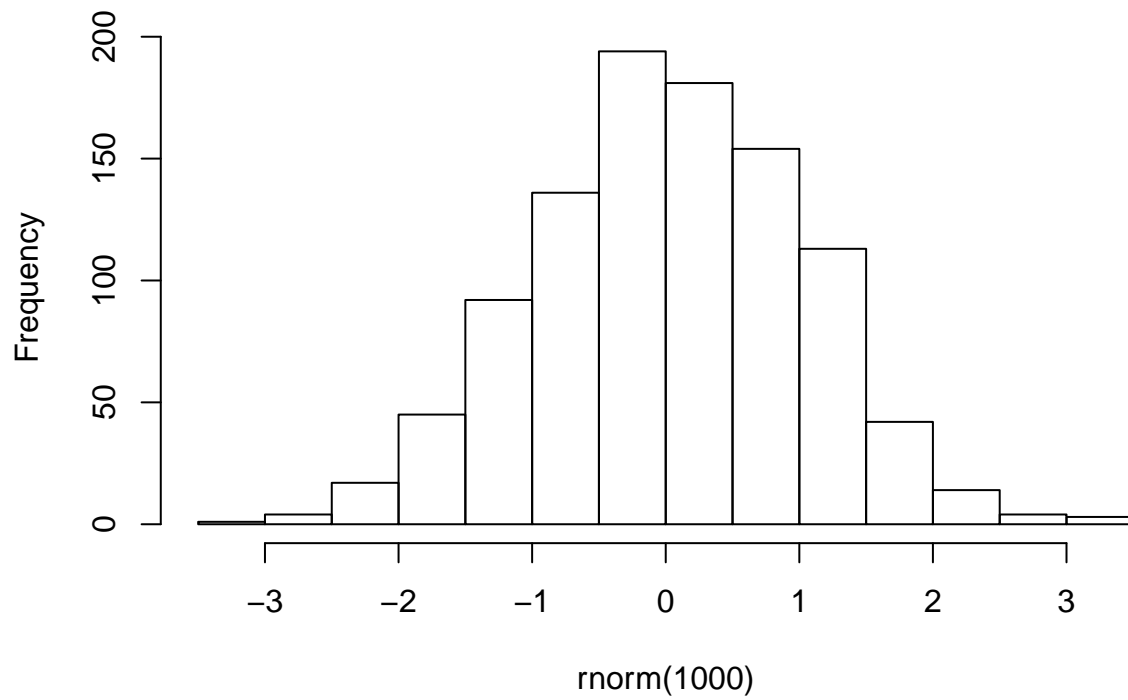
```
##      normal  
## 1 -0.56047565  
## 2 -0.23017749  
## 3  1.55870831  
## 4  0.07050839  
## 5  0.12928774  
## 6  1.71506499
```

```
#muestra normal  
set.seed(123)  
normal<-rnorm(1000,5,3)  
head(data.frame(normal))
```

```
##      normal  
## 1  3.318573  
## 2  4.309468  
## 3  9.676125  
## 4  5.211525  
## 5  5.387863  
## 6 10.145195
```

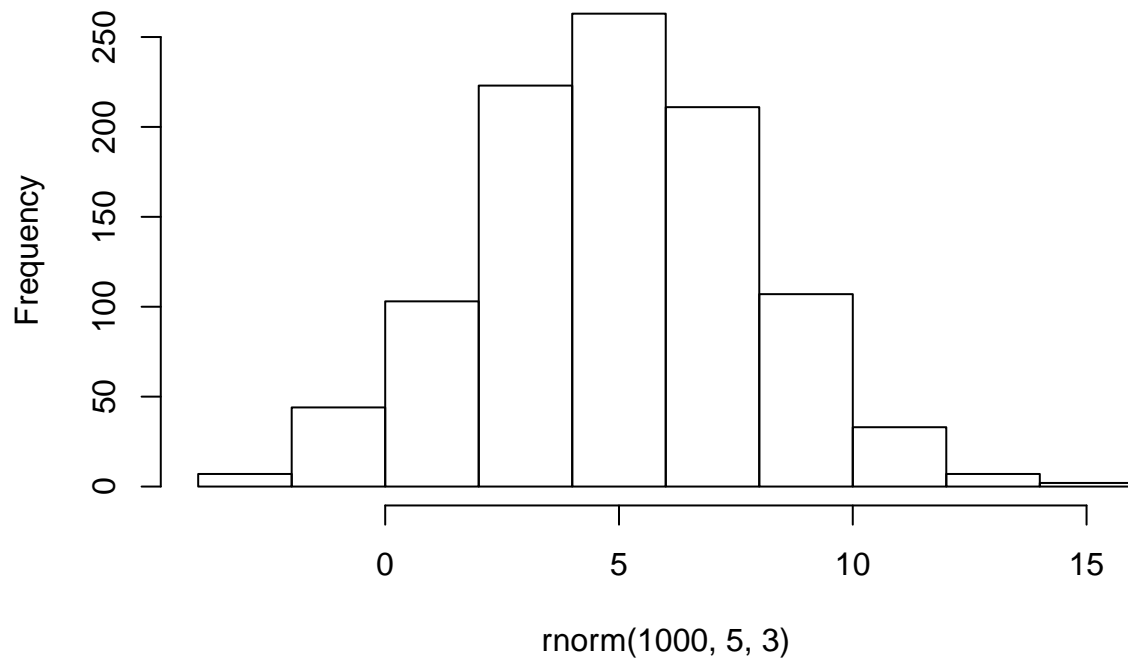
```
#histograma para muestra normal estandar  
hist(rnorm(1000))
```

Histogram of rnorm(1000)



```
#histograma para muestra normal  
hist(rnorm(1000,5,3))
```

Histogram of rnorm(1000, 5, 3)



```
#pregunta 2  
rexp(500,20)
```

```

## [1] 4.753422e-02 2.880857e-03 1.130004e-01 2.168498e-02 7.295411e-02
## [6] 5.835248e-02 5.992295e-02 5.212054e-02 6.632392e-02 7.996352e-02
## [11] 1.585813e-01 2.338411e-02 6.586610e-02 3.788644e-02 1.270447e-02
## [16] 2.104705e-03 1.738881e-02 8.191388e-02 2.659576e-02 2.954431e-02
## [21] 4.926366e-02 1.279808e-01 1.559652e-02 8.769751e-02 1.910805e-01
## [26] 8.034971e-02 1.707104e-01 6.982383e-02 7.735559e-03 1.275321e-01
## [31] 2.366459e-02 3.937273e-02 3.994944e-02 1.465329e-01 2.171863e-02
## [36] 1.005649e-01 1.478584e-01 5.071164e-02 1.935305e-04 1.214323e-01
## [41] 1.617486e-02 1.751152e-02 1.716957e-02 6.765206e-04 1.213069e-01
## [46] 4.770581e-03 5.636066e-02 3.822183e-03 1.187877e-02 6.982278e-02
## [51] 1.310601e-01 7.432148e-02 6.773573e-02 6.279018e-03 8.570595e-03
## [56] 1.103199e-01 2.705230e-02 8.547736e-03 2.724912e-02 5.654826e-02
## [61] 1.947801e-02 2.244837e-03 4.600878e-02 5.007360e-02 1.755471e-01
## [66] 8.621181e-02 3.996416e-02 4.462028e-02 6.105094e-05 1.638330e-02
## [71] 3.318245e-02 2.688582e-02 1.035225e-02 5.835979e-03 2.543782e-03
## [76] 9.067290e-02 2.643633e-02 9.446549e-02 5.913079e-02 2.563977e-02
## [81] 1.241516e-01 1.563932e-02 2.155925e-02 7.271953e-03 3.353561e-02
## [86] 4.078224e-02 8.651201e-03 1.200778e-02 1.693246e-01 1.863035e-02
## [91] 1.932430e-02 3.002795e-02 3.767778e-02 4.332850e-02 9.439789e-02
## [96] 8.061964e-02 1.925053e-02 1.589100e-01 4.055870e-02 9.733276e-03
## [101] 2.025545e-03 6.635117e-02 9.287315e-04 1.517016e-01 9.052845e-03
## [106] 9.393793e-02 6.453131e-02 4.070580e-02 2.034508e-02 7.949117e-02
## [111] 5.458610e-02 1.083312e-01 1.792199e-03 1.066435e-03 1.314929e-02
## [116] 6.129727e-02 2.740646e-02 6.772087e-02 1.525712e-02 1.656228e-02
## [121] 3.300860e-02 1.595923e-02 2.670744e-01 1.560554e-01 1.491255e-02
## [126] 1.128820e-02 7.333099e-03 5.975438e-02 1.633137e-02 7.228557e-02
## [131] 8.077237e-03 4.376001e-02 1.003868e-01 2.239789e-02 6.919654e-02
## [136] 1.433774e-02 1.291636e-02 1.552154e-01 5.019880e-02 2.059890e-02
## [141] 1.361279e-02 3.649440e-02 6.158002e-02 3.714965e-02 1.646573e-02
## [146] 6.839943e-02 1.135874e-01 1.281018e-01 9.149613e-02 2.416294e-03
## [151] 9.607453e-02 1.538964e-03 5.590325e-02 3.263694e-02 4.740708e-02
## [156] 2.139482e-03 8.058787e-02 1.574902e-01 5.249267e-02 2.362563e-02
## [161] 3.796348e-02 1.337551e-01 5.934644e-02 1.170225e-01 7.341725e-02
## [166] 9.464386e-03 1.922820e-02 2.121091e-03 6.479489e-02 6.892216e-02
## [171] 2.918401e-03 1.888692e-02 1.013947e-02 8.329244e-02 5.119690e-02
## [176] 4.331780e-02 5.770554e-02 4.764033e-02 7.124409e-02 6.123716e-03
## [181] 3.737478e-03 1.169324e-02 8.732237e-02 1.953606e-01 5.738380e-02
## [186] 1.085180e-02 9.226177e-02 2.426493e-02 6.889613e-02 1.094777e-01
## [191] 1.168013e-01 4.091716e-02 6.195108e-02 3.582156e-02 1.948358e-01
## [196] 5.016384e-02 5.311948e-02 4.324566e-03 1.426652e-01 9.316719e-03
## [201] 1.486808e-02 3.984305e-03 2.759643e-02 6.175652e-03 6.776280e-02
## [206] 6.922160e-02 9.997027e-03 6.701576e-02 1.162049e-01 1.553736e-02
## [211] 1.417823e-01 8.106034e-02 9.795802e-03 2.964394e-01 4.936116e-02
## [216] 5.557854e-03 5.727843e-03 4.885251e-02 7.977063e-02 3.292975e-02
## [221] 3.758458e-02 3.800818e-02 4.158199e-02 3.658429e-02 4.057724e-03
## [226] 2.253852e-02 9.315974e-02 9.347337e-02 2.235363e-04 3.917003e-02
## [231] 1.558982e-02 7.933073e-04 4.721042e-02 9.623419e-02 3.634697e-03
## [236] 1.850393e-02 1.025537e-02 1.505826e-02 2.539851e-02 9.780606e-03
## [241] 1.256126e-01 1.978127e-02 1.883666e-01 8.640794e-03 7.786090e-03
## [246] 5.339544e-02 2.495745e-02 2.910235e-02 2.422616e-02 4.974631e-02
## [251] 1.926322e-03 4.834725e-02 2.659245e-02 1.226313e-02 6.302892e-02
## [256] 1.905023e-02 1.581098e-03 1.493026e-02 3.689198e-02 4.241344e-02
## [261] 9.985333e-03 5.685794e-02 1.704357e-02 6.247766e-02 9.420112e-03
## [266] 1.715113e-02 6.484365e-02 1.161739e-01 8.581242e-02 1.488977e-01

```

```
## [271] 6.082257e-02 2.134380e-02 3.588694e-02 6.570289e-02 3.044011e-02
## [276] 2.949288e-02 6.176375e-02 2.464602e-02 4.172327e-02 1.727411e-01
## [281] 8.519391e-03 5.508888e-05 2.424724e-02 5.814413e-02 2.389634e-01
## [286] 3.636244e-03 2.508380e-02 1.883912e-01 1.984035e-02 9.012564e-03
## [291] 2.953252e-02 5.645158e-02 5.268002e-02 1.835200e-02 3.385125e-02
## [296] 6.361512e-02 8.851807e-04 1.843003e-02 4.083024e-02 1.805183e-02
## [301] 1.581315e-02 6.887046e-02 1.041144e-02 6.478840e-02 3.636635e-03
## [306] 8.596226e-03 6.631353e-02 4.027187e-03 6.113671e-03 5.312499e-02
## [311] 3.463609e-02 1.181672e-01 1.039845e-01 1.173895e-01 1.205357e-02
## [316] 3.838733e-02 4.226505e-02 6.906931e-02 2.392730e-02 1.248518e-02
## [321] 7.420621e-03 1.337403e-01 7.320583e-02 7.632398e-02 9.266639e-02
## [326] 1.953393e-01 3.761593e-02 1.583658e-01 1.445052e-01 8.508644e-02
## [331] 8.480124e-03 6.942376e-02 2.064991e-02 2.418923e-02 8.266146e-03
## [336] 1.871676e-02 7.868023e-02 1.941811e-01 7.351440e-02 1.920869e-02
## [341] 4.658515e-02 5.440357e-02 1.654176e-02 1.360405e-02 3.131328e-02
## [346] 3.243667e-03 3.674150e-02 1.109714e-02 1.279401e-02 8.185986e-02
## [351] 6.766434e-02 4.115856e-02 6.077332e-02 2.867682e-02 1.761872e-02
## [356] 6.659040e-02 9.874282e-04 6.209604e-02 4.121529e-02 3.390080e-02
## [361] 7.582523e-03 1.453592e-02 5.714433e-02 1.072303e-02 2.952842e-02
## [366] 4.729848e-02 1.076950e-01 6.460953e-02 4.267342e-02 2.764627e-02
## [371] 2.814195e-03 1.075020e-01 1.908517e-02 2.764872e-02 1.422583e-02
## [376] 5.301021e-02 2.755351e-02 4.102285e-02 6.939305e-02 1.459172e-02
## [381] 3.121010e-02 9.263529e-02 2.274803e-02 9.826174e-03 4.665251e-02
## [386] 2.789913e-02 2.570127e-02 1.522769e-02 1.437888e-02 6.092068e-02
## [391] 1.060267e-01 6.587787e-03 1.279817e-01 1.196055e-01 6.034765e-02
## [396] 4.580100e-02 2.038317e-02 1.994157e-02 2.404361e-02 4.177454e-02
## [401] 4.110552e-02 2.524120e-02 5.477012e-03 2.722272e-02 1.207752e-03
## [406] 1.099071e-02 1.606834e-02 1.786938e-02 6.932062e-02 1.474557e-02
## [411] 8.790302e-02 3.200643e-02 6.103565e-02 2.863827e-02 8.008860e-03
## [416] 2.086130e-02 3.023569e-02 3.943915e-02 2.019692e-03 4.721004e-02
## [421] 5.126359e-03 9.617973e-02 1.038644e-02 2.556278e-03 6.906470e-02
## [426] 2.158345e-02 8.049123e-02 5.866059e-02 3.803168e-02 3.130250e-02
## [431] 1.389251e-02 2.665954e-02 8.457282e-03 1.189027e-02 1.692459e-01
## [436] 1.970398e-01 3.945188e-02 4.232213e-02 4.550144e-02 2.926365e-02
## [441] 3.681763e-02 9.145657e-02 1.263200e-01 4.255908e-02 8.744924e-02
## [446] 1.611888e-02 8.455355e-02 2.901262e-02 9.938549e-02 3.146785e-03
## [451] 1.265286e-01 7.555427e-02 9.953667e-02 6.110894e-03 1.577222e-02
## [456] 5.364024e-02 2.691076e-03 4.561631e-02 4.153449e-02 6.166358e-03
## [461] 1.597790e-02 5.649741e-02 4.133712e-03 5.199285e-02 3.253666e-02
## [466] 7.388031e-03 5.457112e-03 8.654533e-02 3.880482e-02 1.064417e-01
## [471] 1.246737e-02 2.190956e-02 1.379926e-02 1.675504e-02 1.278483e-01
## [476] 4.162132e-02 5.450162e-03 3.360192e-02 3.450282e-02 6.053609e-02
## [481] 1.818011e-02 3.989928e-02 3.248792e-02 4.266881e-02 1.164478e-01
## [486] 5.262232e-02 7.416150e-02 1.805769e-02 5.014405e-02 8.468720e-03
## [491] 1.686861e-02 2.918133e-02 4.358092e-02 5.010991e-02 2.643200e-03
## [496] 3.541650e-03 1.742117e-02 1.841151e-02 2.617352e-01 2.528250e-02
```

```
#A
```

```
mean(rexp(500,20))#es menor a el valor esperado de la distribucion exponencial
```

```
## [1] 0.05227683
```

```
#B
```