PERGUNTA 9

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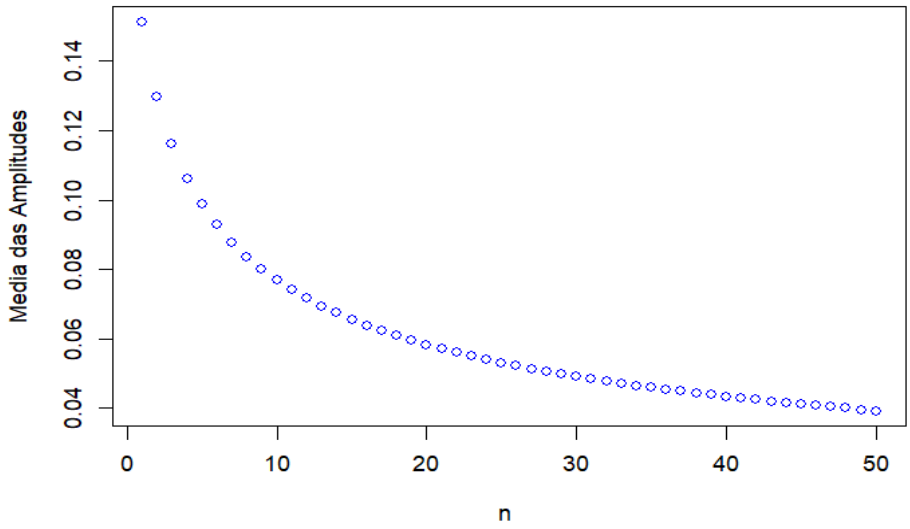
```r
library(ggplo2)
set.seed(623)
m=750
n_arr = seq( 100 ,  5000 , 100)
lam= 1.26
one_alpha  =  0.97
alpha = 0.03
A = c()
MA = c()
j=1


for ( i in n_arr){
  while( j < m ){
    j=j+1
    x  =mean(rexp(i,lam))
    y = sd( rexp(i ,lam))
    lower = x - one_alpha*y
    lower_sqrt = lower / sqrt(i)

    upper = x + one_alpha*y
    upper_sqrt = upper / sqrt(i)

    diff = upper_sqrt - lower_sqrt
    A  = c(A , diff)
  }
  j=1
  new_MA = mean(A)
  MA = c(MA , new_MA)
}
plot(MA, xlab= "n " ,ylab="Media das Amplitudes", col = "blue")
```



Através da analise do gráfico podemos concluir que a Média das amplitudes diminui à medida que o n aumenta. A média das amplitudes tende para 0.