# TRABAJO 2
# TEOREMA CENTRAL DEL LIMITE
# PRUEBAS DE NORMALIDAD

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Simulación Estadística

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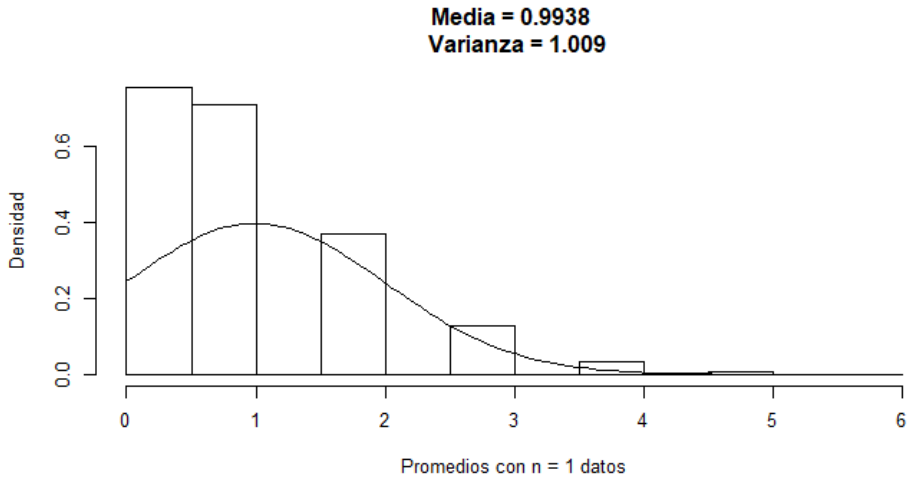
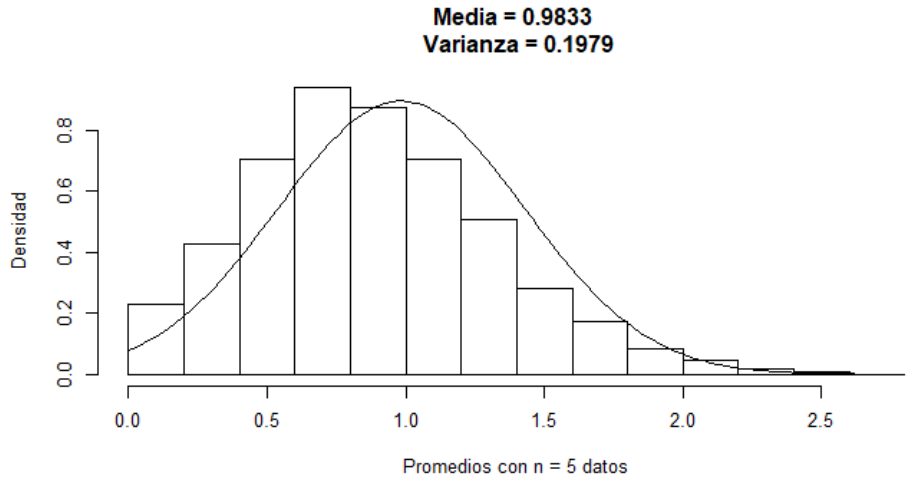
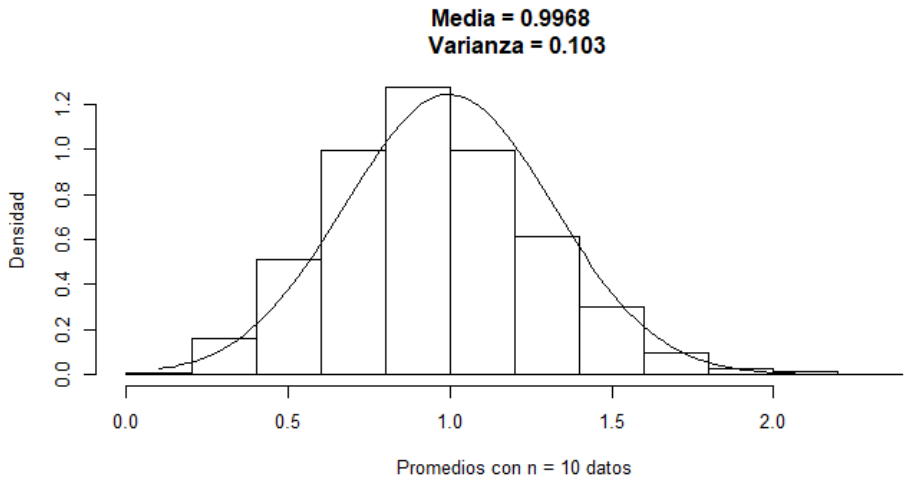
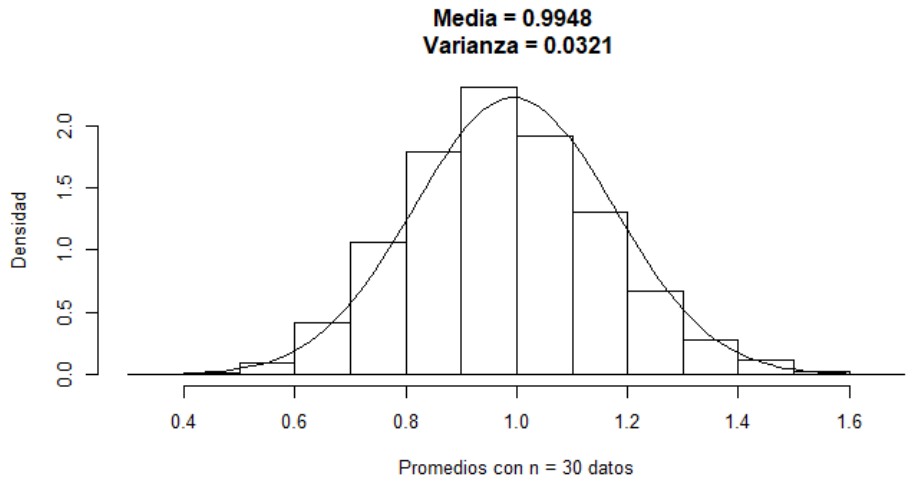
# Simulación distribución Poisson($\lambda = 1$)

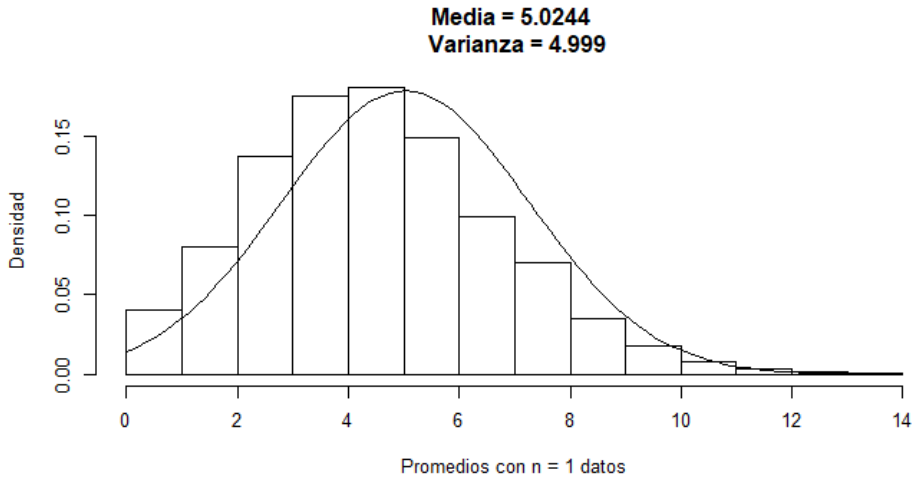


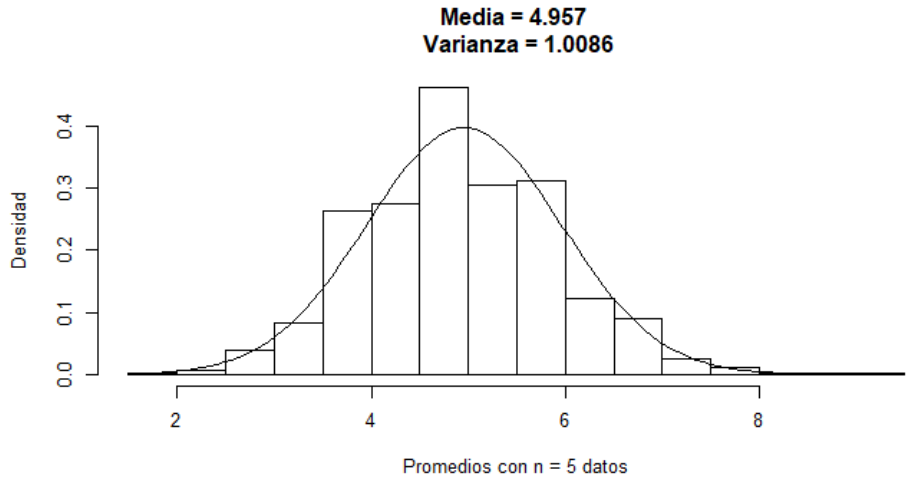



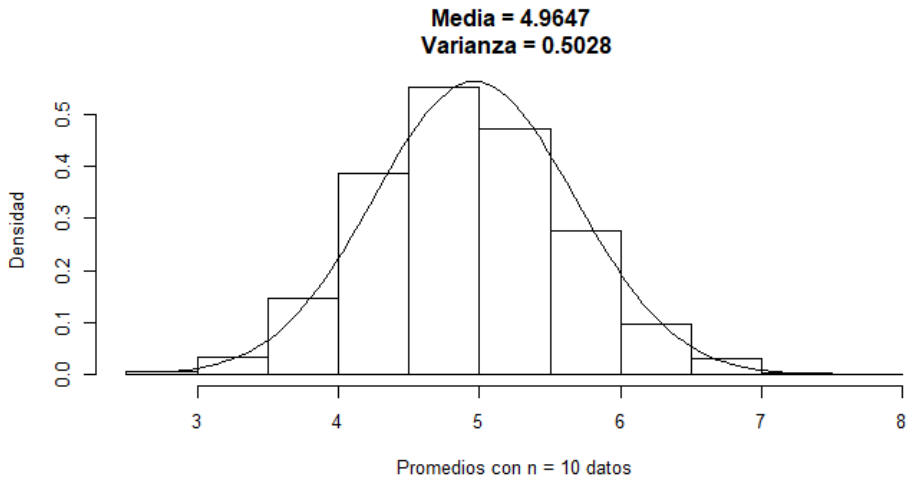



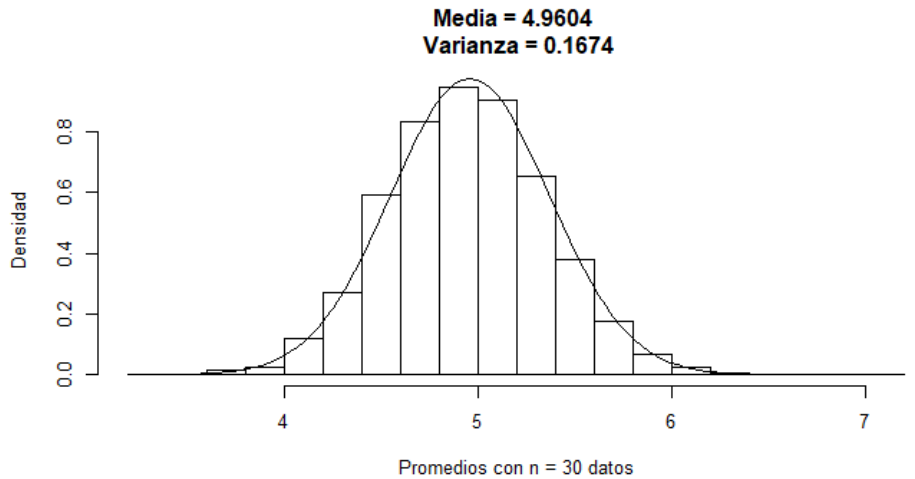



# Simulación distribución Poisson($\lambda = 5$)

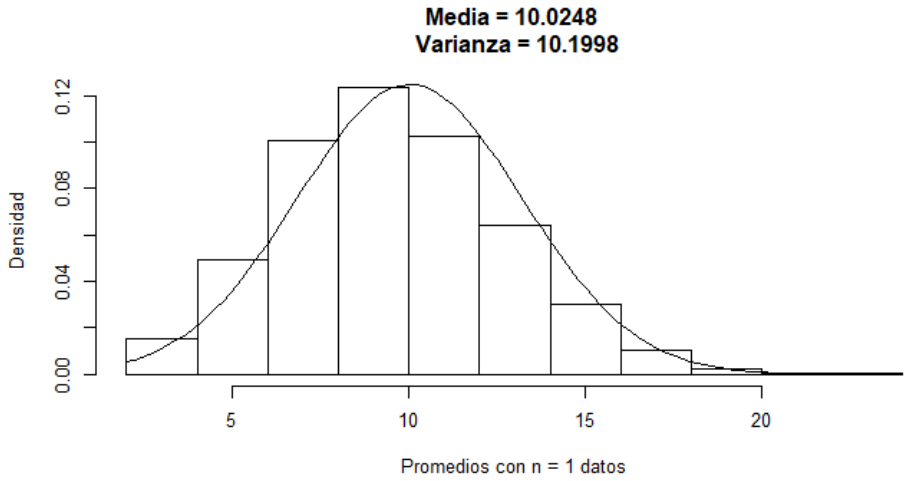


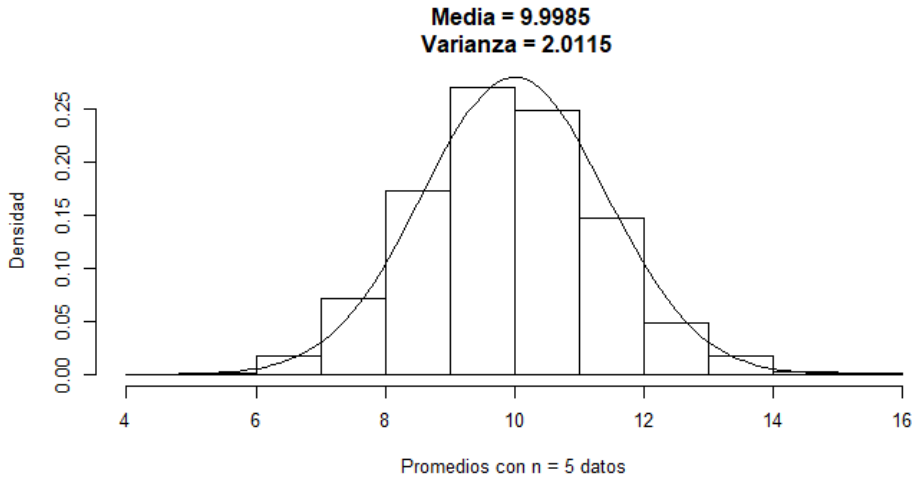



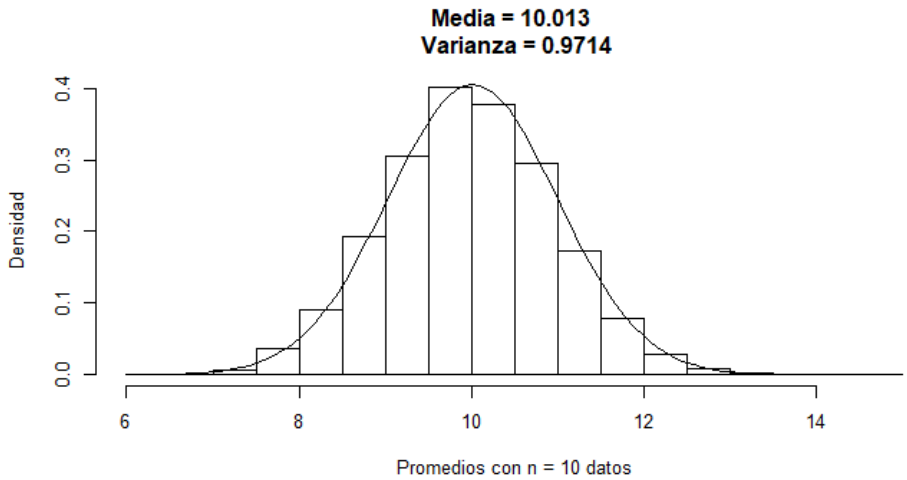



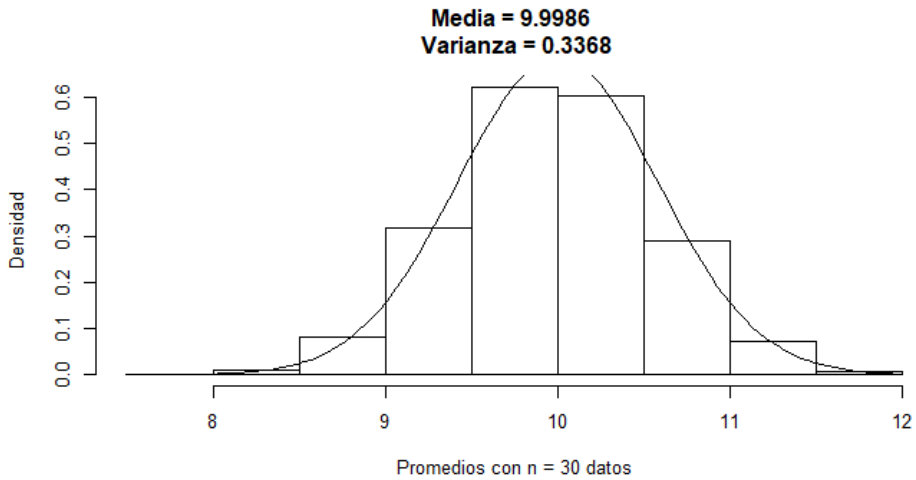



# Simulación distribución Poisson($\lambda = 10$)

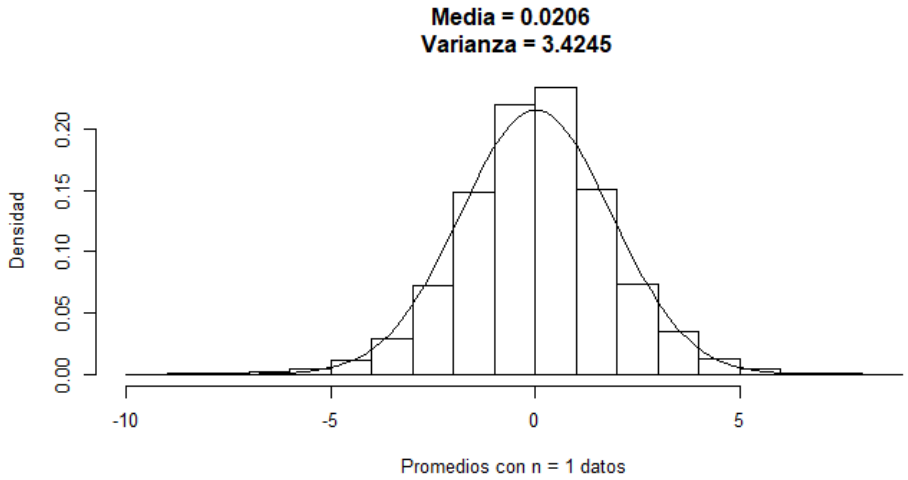


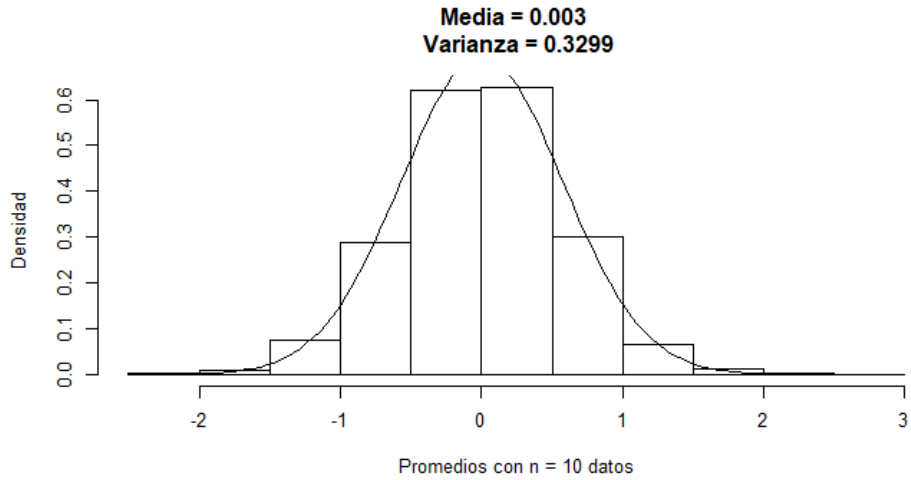



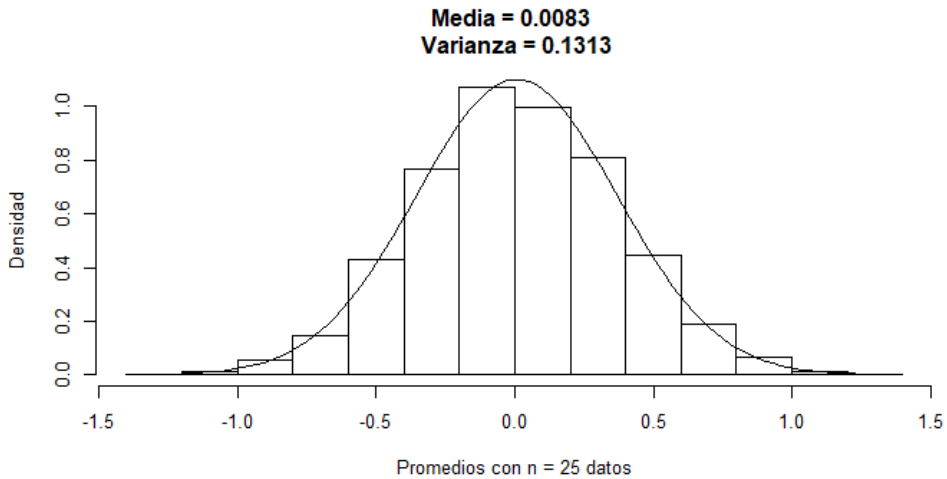



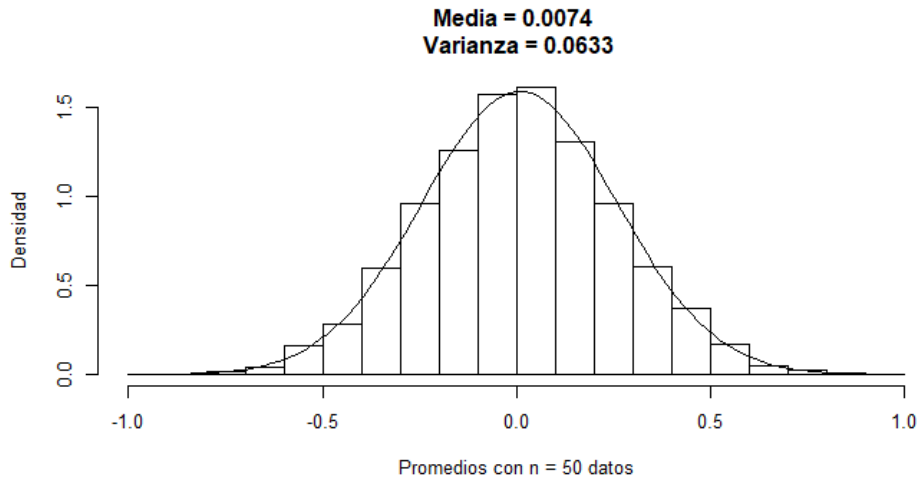



# Simulación distribución Logística($\alpha = 0, \beta = 1$)

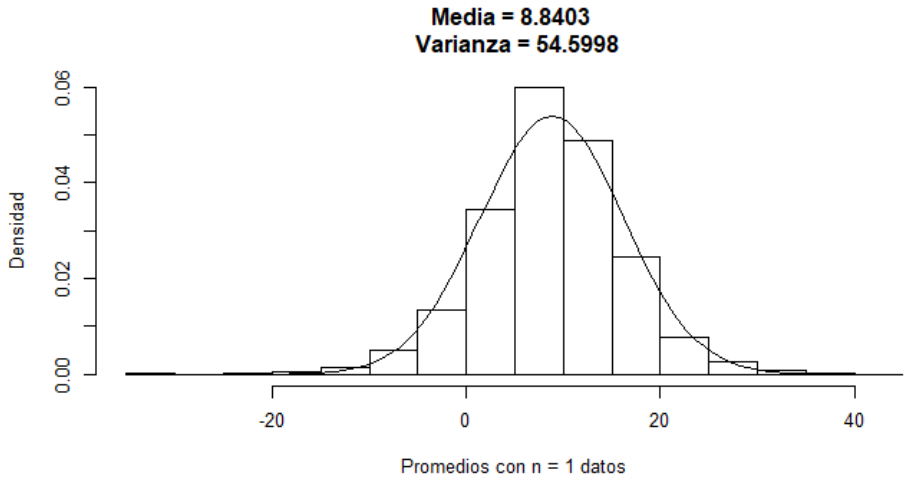


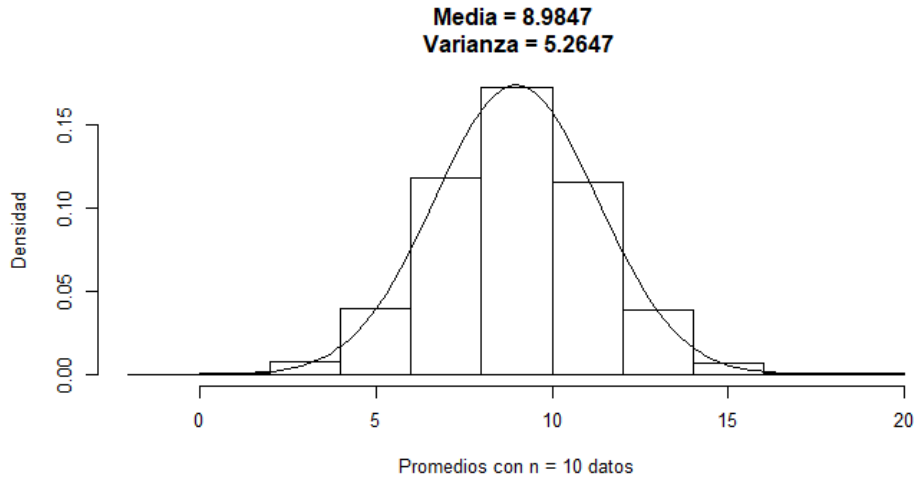



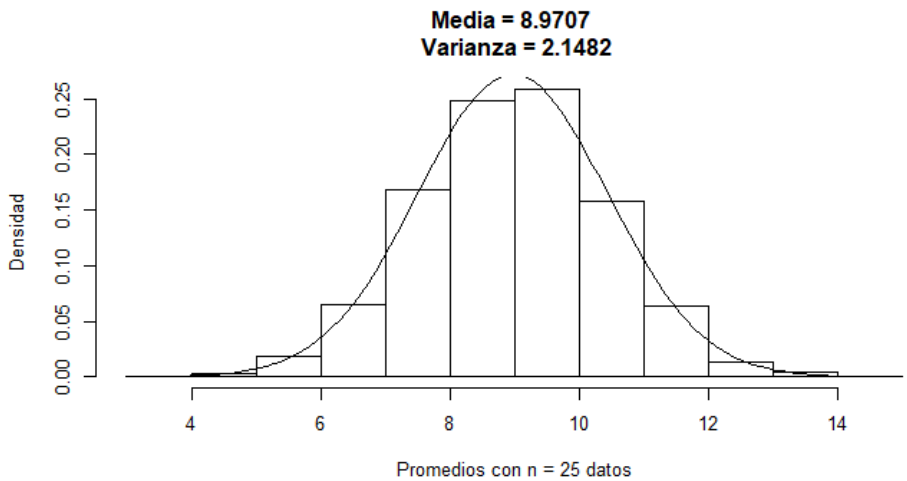



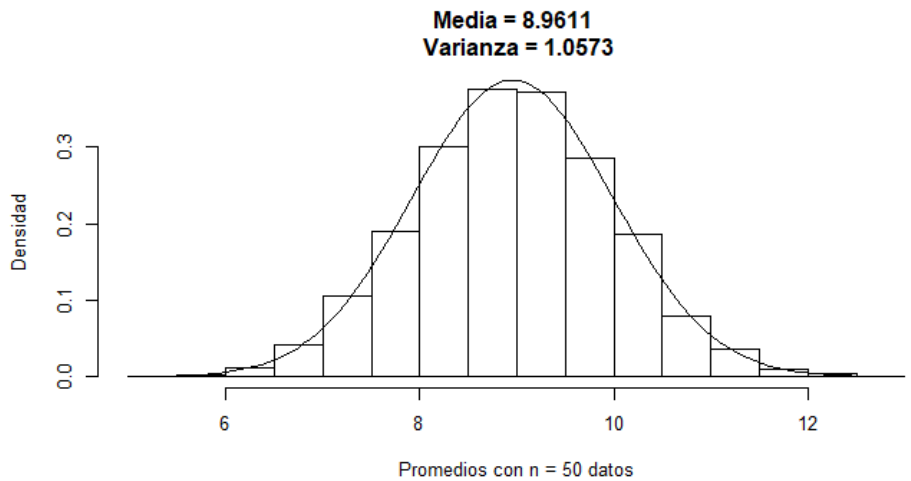



# Simulación distribución Logística($\alpha = 9, \beta = 4$)

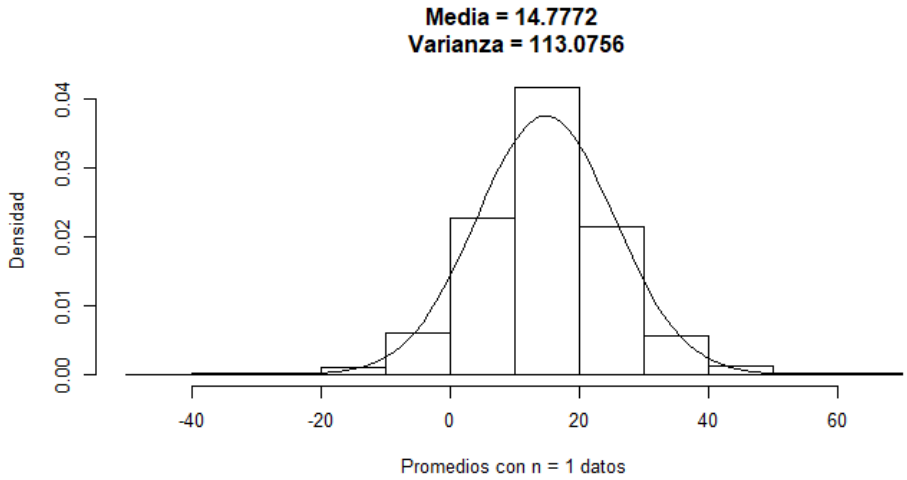


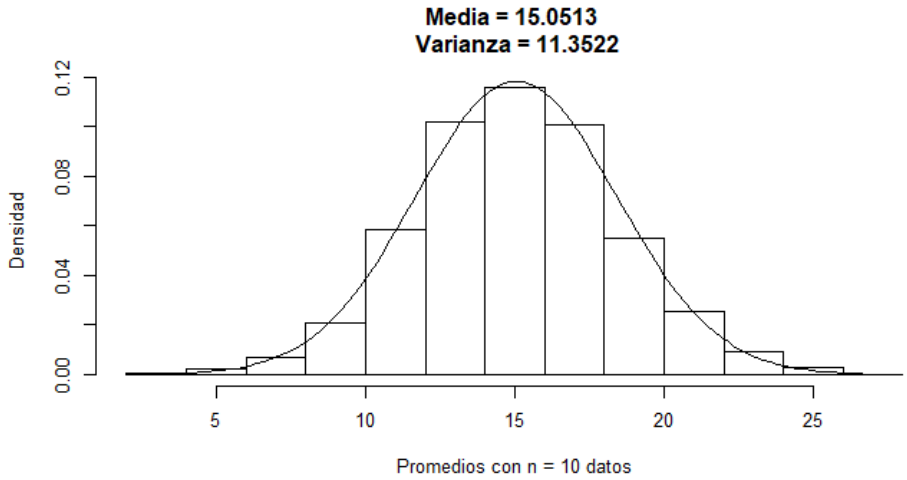



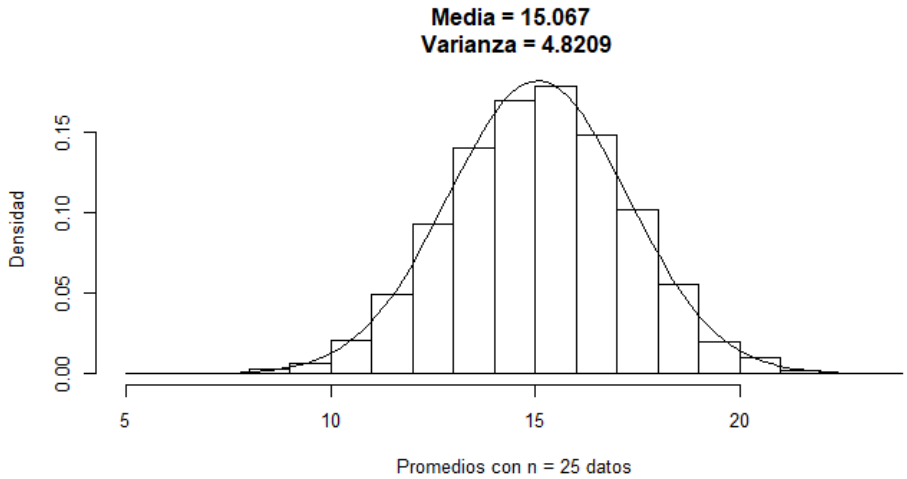



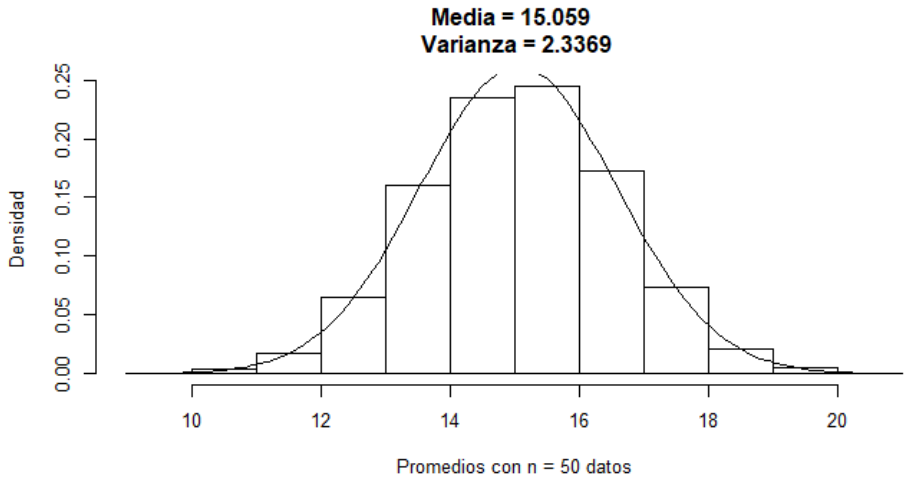



# Simulación distribución Logística($\alpha = 15, \beta = 6$)



# Resultados prueba de Cramér-Von Mises para la distribución Poisson

| | n=1 | | n=5 | | n=10 | | n=30 | |
|---|---|---|---|---|---|---|---|---|
| Parámetro | W | P-Valor | W | P-Valor | W | P-Valor | W | P-valor |
| λ=1 | 413.11 | 0.09893 | 684.06 | 0.1594 | 773.64 | 0.1755 | 867.2 | 0.1907 |
| λ=5 | 1574.2 | 0.2727 | 1665.3 | 0.2805 | 1666.5 | 0.2806 | 1666.6 | 0.2806 |
| λ=10 | 1665.5 | 0.2805 | 1666.7 | 0.2806 | 1666.7 | 0.2806 | 1666.7 | 0.2806 |

Figura: Comparación resultados prueba de Cramér-Von Mises

# Resultados prueba de Cramér-Von Mises para la distribución Logística

| | n=1 | | n=10 | | n=25 | | n=50 | |
|---|---|---|---|---|---|---|---|---|
| Parámetro | W | P-Valor | W | P-Valor | W | P-Valor | W | P-valor |
| $\alpha$=0,$\beta$=1 | 34.305 | 0.00003161 | 44.849 | 0.0002001 | 123.58 | 0.01235 | 186.76 | 0.03106 |
| $\alpha$=9,$\beta$=4 | 1119.3 | 0.2254 | 1664.4 | 0.2805 | 1666.7 | 0.2806 | 1666.7 | 0.2806 |
| $\alpha$=15,$\beta$=6 | 1254.3 | 0.2411 | 1666.6 | 0.2806 | 1666.7 | 0.2806 | 1666.7 | 0.2806 |

Figura: Comparación resultados prueba de Cramér-Von Mises