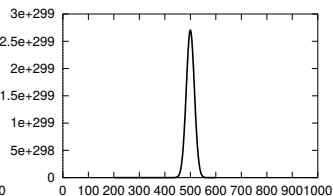
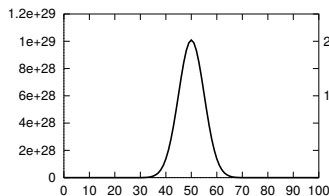


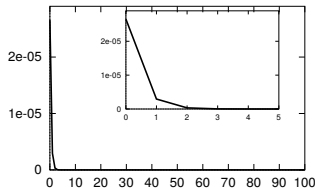
N = 100

N = 1000

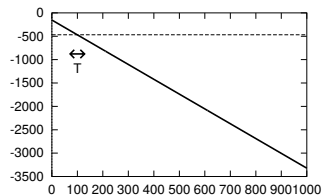
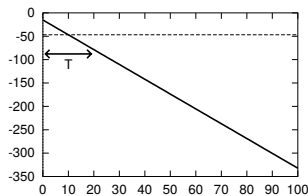
$$n(r) = \binom{N}{r}$$



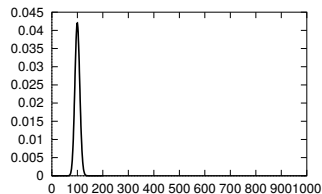
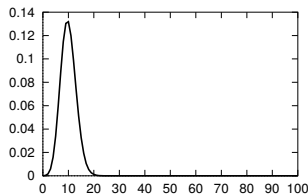
$$P(x) = p_1^r (1 - p_1)^{N-r}$$



$$\log_2 P(x)$$



$$n(r)P(x) = \binom{N}{r} p_1^r (1 - p_1)^{N-r}$$



r

r