extension to
$$\underline{k}$$
:
take K Samples
for $i=1$ to K
Sample $[i] = A[i]$
 $i=k$
Repeat (1 as new element observed
 $i = U_{nt}[i, 2+i]$
 $i = (1 + i)$
 $i = (1 + i)$
 $i = (1 + i)$
 $k = (1 + i)$

Metropolis Hasting's Algorithm
For Complex Systems that (A) you Council express CDF
by you Council Sample from the
syou can complete fix:
a sample

$$a$$
 sample
 a sample
 a sample
 a so a initial Sample
Let XI be the Current sample.
 $X_{0} \sim Sample q(X_{0}|X_{0})$
 $P(X_{0} > X_{0}) = min (\frac{f(X_{0})}{f(X_{0})} \frac{q(X_{0}|X_{0})}{q(X_{0}|X_{0})}, 1)$
 $u = U [o, 1]$
 $if (u \leq P(X_{0} > X_{0}))$
Set X; as next Sample
Set X; as the next Sample

1/ B

$$\frac{1}{f(x_i)} = \frac{1}{f(x_j)} \frac{1}{2} \frac{1}{2}$$