Concept questions

Discussion Week 8

Taking samples of random number ξ , which formula for direct sampling gives the probability distribution

$$f(x) = e^{-x}$$

for many samples?

a)
$$x \leftarrow e^{\xi}$$
 c) $x \leftarrow \xi e^{x}$

b)
$$x \leftarrow -\log \xi$$
 d) $x \leftarrow \xi e^{\xi}$

Taking samples of random number ξ , which formula for direct sampling gives the probability distribution

 $f(x) = e^{-x}$

for many samples?

a)
$$x \leftarrow e^{\xi}$$
 c) $x \leftarrow \xi e^{x}$

b)
$$x \leftarrow -\log \xi$$
 d) $x \leftarrow \xi e^{\xi}$

For Monte Carlo calculations, give the relationship between the number of particle histories, N, and the uncertainty, R?

For Monte Carlo calculations, give the relationship between the number of particle histories, N, and the uncertainty, R?

$$R \propto \frac{1}{\sqrt{N}}$$