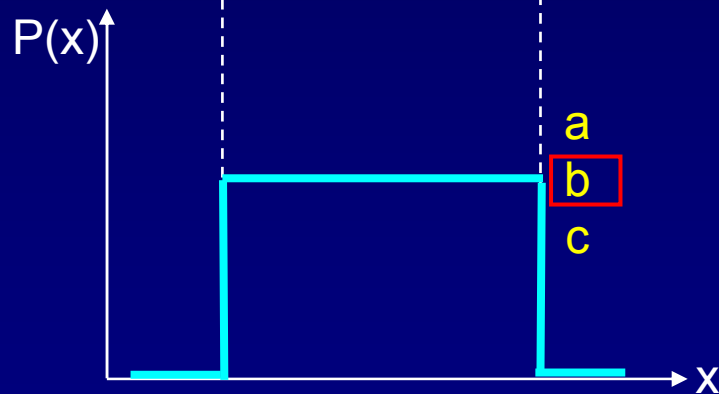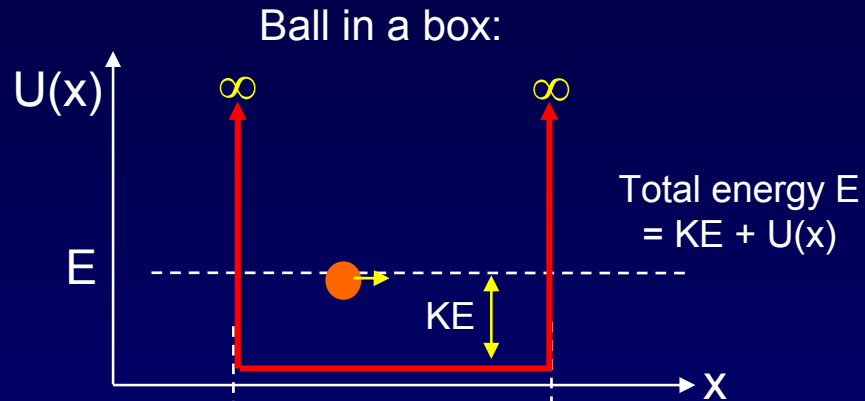# Solution

Start a classical (large) object moving in a potential well (two are shown here).
At some random time later, what is the probability of finding it near position x?

Ball in a box:

U(x)

∞   ∞

Total energy E
= KE + U(x)

E

KE

X

P(x)

a
b
c

Probability is equally
distributed

Ball in a valley:

U(x)

E   KE

X

P(x)

a
b
c