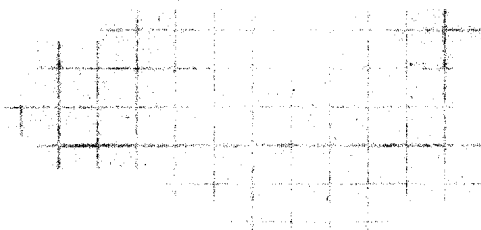
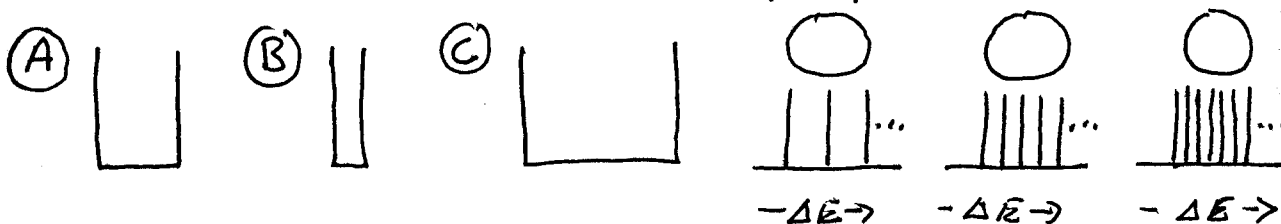


① Why doesn't the "solar system" model of the atom work?



② Let's say  $\psi(x)$  is a normalized wavefunction that describes a quantum object over  $-\infty < x < \infty$ . Write down the appropriate integral needed to calculate the probability of finding the object between  $x = 1$  and  $x = 5$ .

③ Match the spectrum with the appropriate box



④ Order following wave function according to increasing energy.

