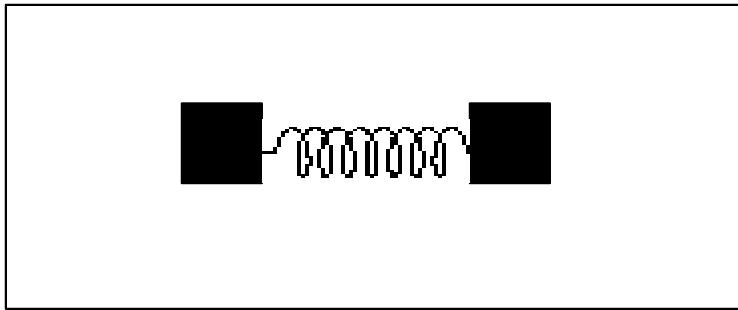


Consider the following systems made from identical masses, springs and boxes. Which system would be measured to have more mass?

Un-stretched



A



B

m_p : mass of proton

m_N : mass of neutron

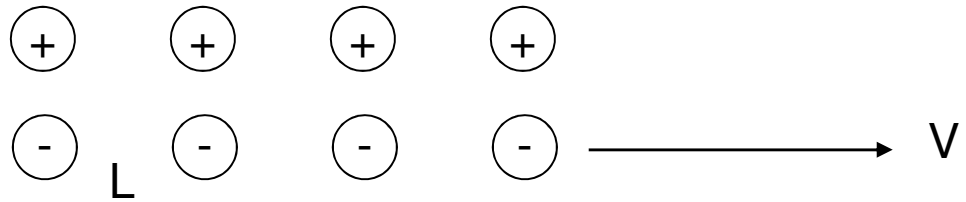
m_e : mass of electron

What is the mass of a Helium atom?

a) less than $2m_p + 2m_N + 2m_e$

b) $2m_p + 2m_N + 2m_e$

c) more than $2m_p + 2m_N + 2m_e$

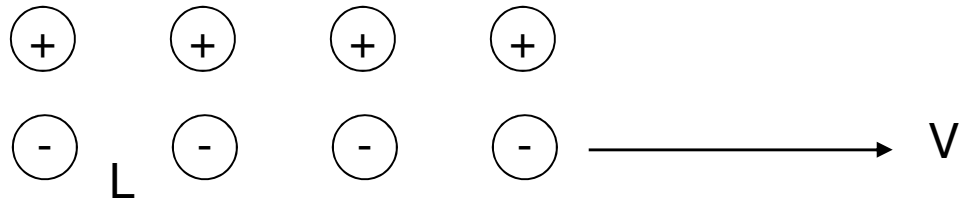


If the charge density of the negative and positive charges are $\pm \lambda$, what is the charge density of the positive charges in the frame of stationary negative charges?

a) λ

b) $\lambda\gamma$

c) λ/γ



If the charge density of the negative and positive charges are $\pm \lambda$, what is the charge density of the negative charges in the frame of stationary negative charges?

a) $-\lambda$

b) $-\lambda\gamma$

c) $-\lambda/\gamma$

