## Speed of Charge from Repulsion

Step 1: Draw in your moveable charge at point A. Fill in the values of both charges and the mass of the moveable charge


Step 2: Calculate the stored energy between the two charges at point A. Show your work neatly below. Make sure everything is in the proper unit. (Alternatively, you can find the voltage at point A)

Step 3: Draw in your moveable charge at point B. Fill in the values of both charges and the mass of the moveable charge


Step 4: Calculate the stored energy between the two charges at point B. Show your work neatly below. (Alternatively, you can find the voltage at point B)

Step 5: Calculate the change in energy from point $A$ to point $B$ and then use the mass of the charge to find its speed at point $B$. Remember that it was at rest at point A. Enter your answers to see if you did everything correctly

