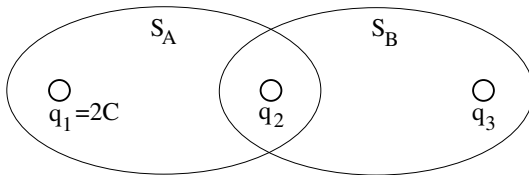




The electric fluxes through the Gaussian surfaces  $S_A$  and  $S_B$  are  $\Phi_E^{(A)} = 1C/\epsilon_0$  and  $\Phi_E^{(B)} = 3C/\epsilon_0$ , respectively.



Find the electric charges  $q_2$  and  $q_3$ .