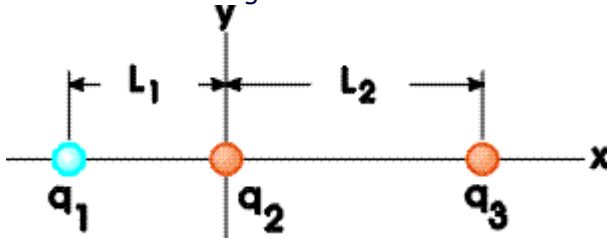


Three point charges, $q_1 = -4.10 \text{ nC}$, $q_2 = 5.11 \text{ nC}$ and $q_3 = 3.46 \text{ nC}$ are aligned along the x axis as shown in the figure below.



Assume that $L_1 = 0.461 \text{ m}$ and $L_2 = 0.824 \text{ m}$. Calculate the electric field at the position $(2.12, 0)$.