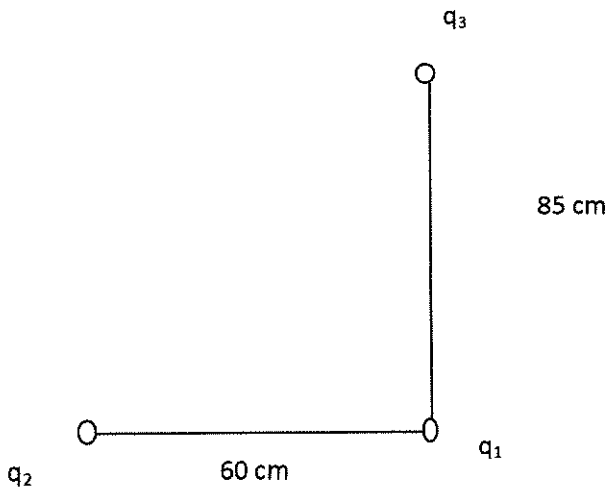
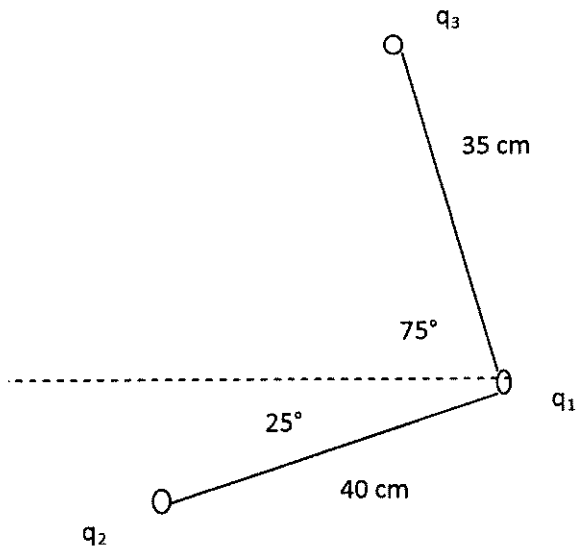
Electric Force - Practice

1. Determine the electric force (magnitude and direction) on a point charge q_1 (-40 μC) due to q_2(+55μC) and q_3 (-85 μC).



2. Determine the electric force (magnitude and direction) on q_2 due to q_1 and q_3.

3. . Determine the electric force (magnitude and direction) on a point charge q_1 (-80 μC) due to q_2(+15μC) and q_3 (-85 μC).



4. Find the charge on q_1 provided that q_1 is 25cm away from q_2 (q_2 =40μC)and experiences repulsive electric force of 465N.

5. Consider point charges of 35μC and -89μC. What is the distance of separation between two point charges if the attractive force experienced by one of the charges is 57N?