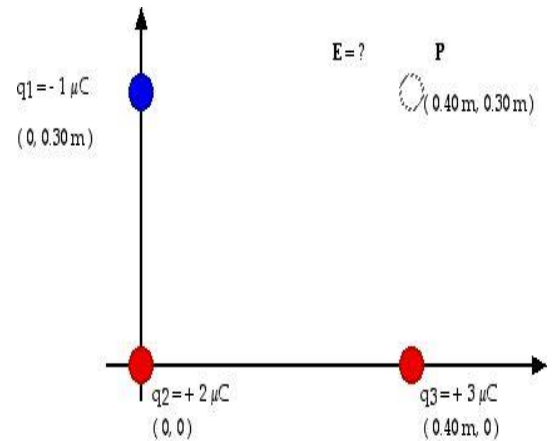
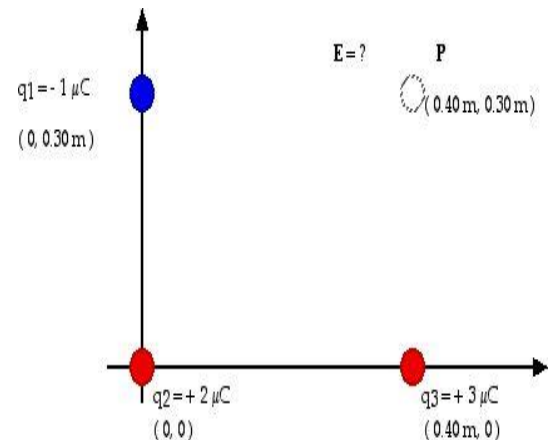


Homework #5

- 1- Charges q_1 , q_2 , and q_3 have the values and locations shown here. What is the electric field (magnitude **and** direction) at point P as shown here?



- 2- Charges q_1 , q_2 , and q_3 have the values and locations shown here. What is the electric potential at point P as shown here?



- 3- The capacitor circuit shown here is connected to a **12-volt** power supply.

(a) Calculate the **equivalent capacitance** of the circuit shown here.

(b) What **charge** will flow out of the battery?

(c) What **charge** is stored on the $2.0 \mu\text{F}$ capacitor?

(d) What **voltage** is across the $2.0 \mu\text{F}$ capacitor?

