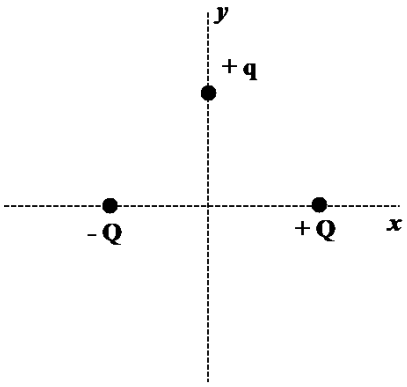
Sample Quiz

Name: **Student ID:**

1. An electron is released from rest in a uniform electric of magnitude 20000 N/C. Calculate the acceleration of the electron (ignore gravitation)

2. Three-point charges, $+q$, $+Q$, and $-Q$, are placed at the corners of an equilateral triangle as shown in Figure below. No other charged objects are nearby. What is the direction of the net force on charge $+q$ due to the other two charges? Sketch in the figure. 3



3. A particle with a charge to mass ratio of 1.0 μC/mg starts from rest in a uniform electric field with magnitude, E = 10.0 N/C. How far will the particle move in 2.0 seconds?

4. Find the true/false statement:

(i) The combination of two charges of equal and similar sign is called a dipole.

(ii) The SI unit for the electric field is Coulomb.

(iii) When charges are transferred by simple interactions (i.e. rubbing), it can be either positive or negative charge which is transferred.