

Name: _____

HONORS PHYSICS – ELECTRIC FORCES AND FIELDS QUIZ 2
(electric fields)

- 1.) How is the direction of an electric field defined?

- 2.) When evaluated at a point, what does the *magnitude* of an electric field actually tell you? (no more than 15 words)

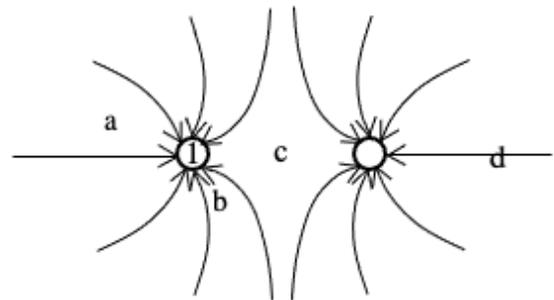
- 3.) An electric field equal to $\vec{E} = -5\hat{j}$ exists in a region where there is no gravity.
 - a.) In what direction will a positive charge accelerate if put in the field?

 - b.) A -6 C charge is placed at the point. How large a force (as a vector) will the charge feel?

- 4.) The electric field lines shown to the right are generated by two point charges.
 - a.) In what direction will a negative charge accelerate if placed at Point d?

 - b.) Is the charge on the left (identified with the number “1”) positive or negative?

 - c.) What is special about the region in which resides Point c?



- d.) Which of the lettered points has the largest electric field intensity?

Extra Credit: On the axis shown to the right, draw in the electric field vector *found at the origin* generated by the positive charge Q.

