PHYS 212L Charge & Field Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Partner(s):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **a. Charge Polarity Data:**

1. What polarity is the charge, on the rubber rod?\_\_\_\_\_\_\_on the glass rod?\_\_\_\_\_\_\_\_\_\_

2. What is the peak value of charge produced by the rubber rod?\_\_\_\_\_\_\_\_\_\_\_\_\_
 by the glass rod?\_\_\_\_\_\_\_\_\_\_\_\_\_
         (Use the smart tool to read)
**b. Charging by Contact Data:**

a. What is the value of charge produced by the rubber rod?\_\_\_\_\_\_\_\_

    b. What is the value of charge produced by the glass rod?\_\_\_\_\_\_\_\_

**c. Charging By Induction Data:**

|  |  |  |
| --- | --- | --- |
|  | Hard-rubber rod | Glass rod |
| Peak value of charge produced while the rod is inside |  |  |
| Peak value of the induced charge  |  |  |
| The polarity of the induced charge |  |  |

**d.** Draw a [series of diagrams](http://www.splung.com/content/sid/3/page/electrostatics), showing how you charged the calorimeter jacket, by induction, for any one of the rods.

Charge the hard-rubber rod with fur (diagram-1) and lower the rod inside the jacket (diagram-2) without touching the inside, and hold it there. While holding the rod inside, ground the jacket (diagram-3), then remove the ground (diagram-4), and then remove the rod (diagram-5)