Electric Fields

1. Calculate the electric field at the origin resulting from the following point charges:

- **Charge A: $q_A = 2Q$; A(-l,0)**
- **Charge B: $q_B = -5Q$; B(2l,0)**
- **Charge C: $q_C = -Q$; C(-l,l)**

2. The electric field of some point charge is…

$$\vec{E} = \frac{-.005}{r^2}\hat{r}$$

What is the magnitude of the charge? Is the charge positive or negative?

3. Draw the field lines for the following distribution of charge (Q > 0).

How about this distribution (infinite plane of uniform, negative charge)?