Consider the electric field near a large sheet of uniform positive charge, $\sigma$. What direction does it point? How do you know?

1. up
2. down
3. left
4. right

5. None of these

Consider the electric field near a large sheet of uniform charge, $\sigma$. Which of these has the right dimensions?

$$
([\sigma]=\mathrm{Q} / \mathrm{A})
$$

$$
\text { 1. } E=2 \pi k_{C} \sigma / d^{3}
$$

$$
\text { 2. } E=2 \pi k_{C} \sigma / d^{2}
$$

$$
\text { 3. } E=2 \pi k_{c} \sigma / d
$$

$$
\text { 4. } E=2 \pi k_{C} \sigma
$$


5. None of these

Consider the electric potential near a large sheet of uniform charge, $\sigma$. If $\sigma>0$, how does the potential change as you go farther away from the sheet?

1. Increases
2. Decreases
3. Stays the same
4. You can't tell without more
 information

A positive charge might be placed near a uniform sheet of charge at one of three spots in a region where there is a uniform electric field. How do the electric potential, $V$, on the charge at positions 1, 2, and 3 compare?

1. $V$ is greatest at 1
2. $V$ is greatest at 2
3. $V$ is greatest at 3
4. $V$ is 0 at all 3 spots
5. $\quad V$ is $=$ at all 3 spots
 but not $=0$.

Two large parallel sheets of charge are separated by a distance $d$, small compared to the size of the sheets. The distance $d$ is small enough that the sheets can be treated as if they were infinite in extent.

Where do you expect the E field to point at the position A ?

1. It should point to the left.
2. It should be essentially 0 .
3. It should point to the right.

