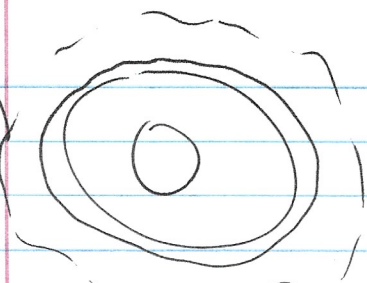


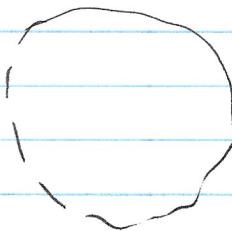
Josh Whitehead  
vlog9343

2

a)



Gaussian Surface:



$$\vec{E} = \frac{Q_{enc}}{\epsilon_0 A_{GS}}$$

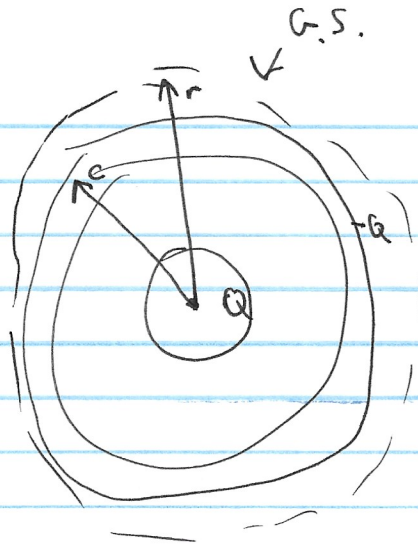
$$Q = \eta A_{enc}$$

$$\vec{E} = \frac{\eta \cdot \cancel{4\pi} a^2}{\epsilon_0 \cancel{4\pi} r^2} = \frac{\eta a^2}{\epsilon_0 r^2} \rightarrow$$

$$\boxed{\vec{E} = \frac{Q}{\epsilon_0 4\pi r^2}}$$

2 b'. E @ bLrLC:  $E=0$  because the outer shell  
is a conductor ~~and~~

2 (c.)



$$E = \frac{Q_{enc}}{\epsilon_0 A_{cs}}$$

~~$$Q_{enc} = Q - Q = 0$$~~

~~$$\therefore E = 0$$~~

~~$$Q_{enc} = Q$$~~

$Q_{enc} = -2Q$  because inner  $Q = +$  and outer  $= -Q$

$$\therefore E = \frac{-2Q}{\epsilon_0 4\pi r^2}$$