

You have an E field given by

$$\mathbf{E} = c \mathbf{r}, \quad (\text{Here } c = \text{constant},$$

$\mathbf{r} = \text{spherical radius vector})$

What is the charge density  $\rho(r)$ ?

- A)  $c$       B)  $c r$       C)  $3 c$       D)  $3 c r^2$   
E) None of these is correct