## Special Problem 4-5.1

Using any valid method, determine the electric field created by the charge density given below:

$$\rho_{v}(\overline{r}) = \begin{cases}
\frac{\varepsilon_{0}}{2r^{2}} & r < 2 \\
0 & r > 2
\end{cases}$$

$$\left[\frac{C}{m^{3}}\right]$$