



On the  $y$ -axis:  $\vec{E} = -\frac{K P}{r^3} \vec{e}_y$  ( $r \gg s$ )

On the  $x$ -axis:  $\vec{E} = \frac{K 2 P}{r^3} \vec{e}_x$  ( $r \gg s$ )

$a.)$  at  $(x, y) = (10 \text{ cm}, 0)$   $r = 10 \text{ cm} \gg s$

$$|\vec{E}| = \frac{2 K P}{r^3} = \frac{2 K g s}{r^3} = \underline{\underline{35.96 \frac{\text{N}}{\text{C}}}}$$

$b.)$  at  $(x, y) = (0, 10 \text{ cm})$   $r = 10 \text{ cm} \gg s$

$$|\vec{E}| = \frac{K P}{r^3} = \frac{K g s}{r^3} = \underline{\underline{17.98 \frac{\text{N}}{\text{C}}}}$$