

14. Since both charges are positive (and aligned along the z axis) we have

$$\left| \vec{E}_{\text{net}} \right| = \frac{1}{4\pi\epsilon_0} \left[\frac{q}{(z - d/2)^2} + \frac{q}{(z + d/2)^2} \right] .$$

For $z \gg d$ we have $(z \pm d/2)^{-2} \approx z^{-2}$, so

$$\left| \vec{E}_{\text{net}} \right| \approx \frac{1}{4\pi\epsilon_0} \left(\frac{q}{z^2} + \frac{q}{z^2} \right) = \frac{2q}{4\pi\epsilon_0 z^2} .$$