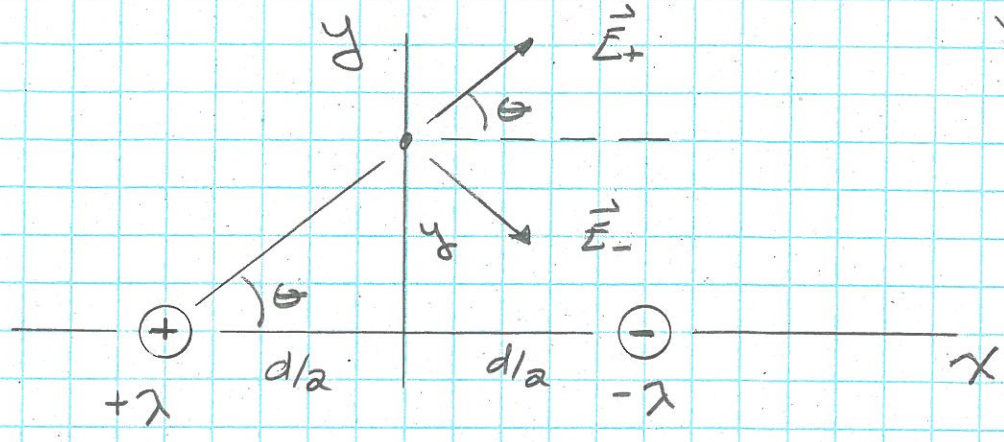

for each line of charge:

$$|\vec{E}| = \frac{2k|\lambda|}{r} \quad \text{with direction shown.}$$

So, for $+\lambda$:

$$E_+ = \frac{2k\lambda}{\sqrt{y^2+d^2/4}}$$

and

$$\vec{E}_+ = E_+ \cos\theta\,\hat{i} + E_+ \sin\theta\,\hat{j}$$

$$\text{where} \quad \cos\theta = \frac{d/2}{r} = \frac{d/2}{\sqrt{y^2+d^2/4}}$$

$$\sin\theta = \frac{y}{r} = \frac{y}{\sqrt{y^2+d^2/4}}$$

So:

$$\vec{E}_+ = \frac{2k\lambda\, d/2}{(y^2+d^2/4)}\,\hat{i} + \frac{2k\lambda\, y}{(y^2+d^2/4)}\,\hat{j}$$

Now, $\vec{E}_-$ is the reflection of $\vec{E}_+$:

$$\vec{E}_- = \frac{2k\lambda\, d/2}{(y^2+d^2/4)}\,\hat{i} - \frac{2k\lambda y}{(y^2+d^2/4)}\,\hat{j}$$

So, the total field is:

$$\vec{E} = \vec{E}_+ + \vec{E}_- = \frac{2k\lambda d}{(y^2+d^2/4)}\,\hat{i} \quad \& \quad |\vec{E}| = \frac{2k\lambda d}{\left(y^2+\frac{d^2}{4}\right)}$$