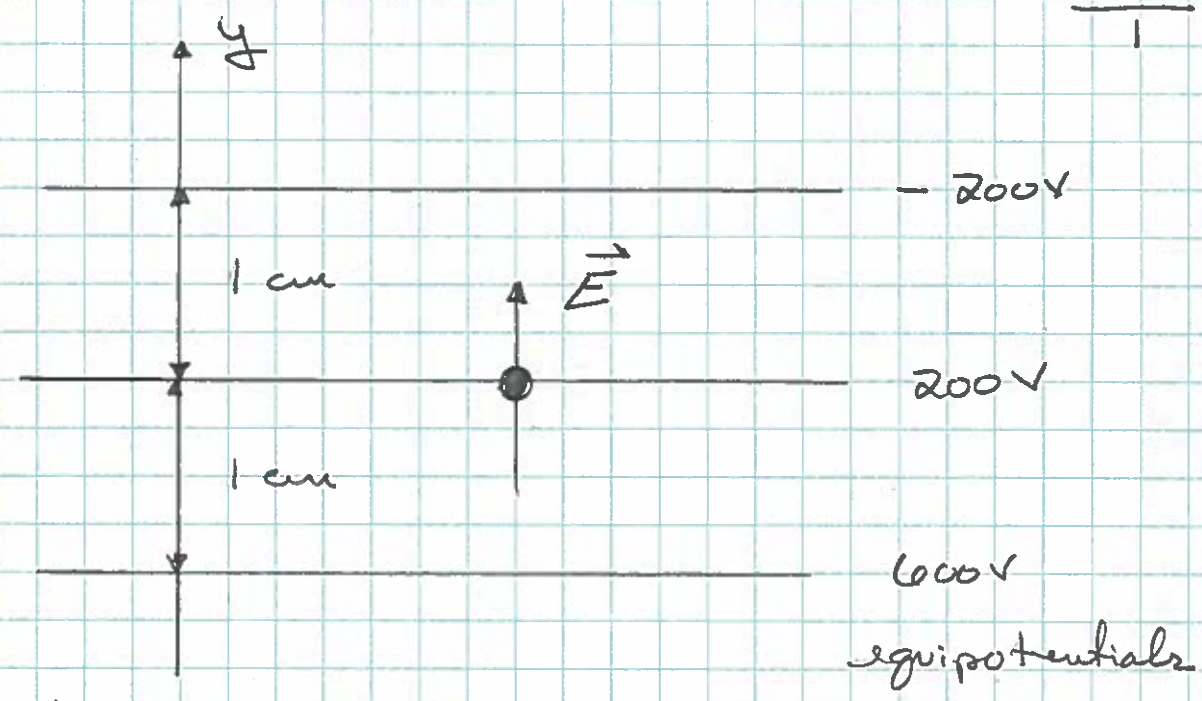

$\vec{E}$ is perpendicular to equipotentials and points "downhill"

$$E_y = -\frac{\partial V}{\partial y} = -\frac{\Delta V}{\Delta y}$$

$$= -\frac{(-200V - 600V)}{0.02m}$$

$$E_y = 40{,}000\ V/m$$