

$$E_{(0,0)} \text{ due to A} = \frac{(9 \times 10^9)(2 \times 10^{-6})}{(.03)^2} = 2 \times 10^7 \text{ N/c (negative y)}$$

$$E_{(0,0)} \text{ due to C} = \frac{(9 \times 10^9)(2 \times 10^{-6})}{(.04)^2} = 1.125 \times 10^7 \text{ N/c (negative x)}$$

$$E_{(0,0)} \text{ due to B} = \frac{(9 \times 10^9)(4 \times 10^{-6})}{(.05)^2} = 1.44 \times 10^7 \text{ N/c}$$

↓

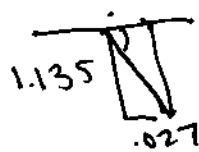
break into x + y components

$$1.152 \times 10^7 \text{ N/c } \hat{x} + .865 \times 10^7 \text{ N/c } \hat{y}$$

$$E_{\text{net}} = (1.152 \times 10^7 - 1.125 \times 10^7) \hat{x} + (.865 \times 10^7 - 2 \times 10^7) \hat{y}$$

$$E_{\text{net}} = (.027 \times 10^7 \hat{x} - 1.135 \times 10^7 \hat{y}) \quad \tan^{-1}\left(\frac{1.135}{.027}\right) = 88.6^\circ$$

$$1.1353 \times 10^7 \text{ N/c}$$



below pos. x axis