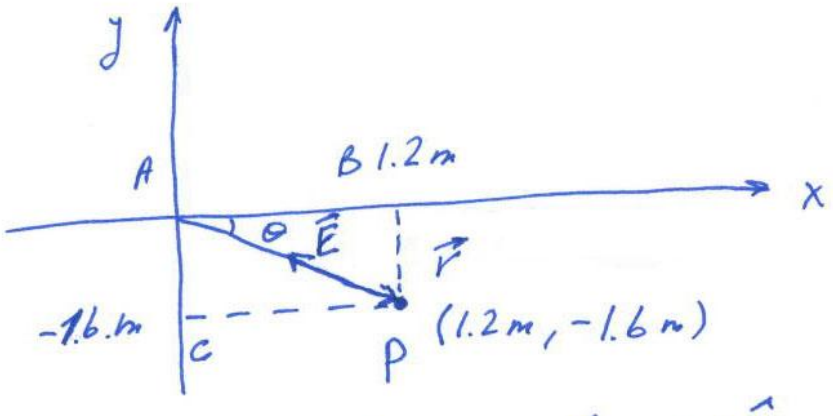
#15.54



We know

$|\vec{E}| = 1.8 \times 10^3 \ N/C$

what are

$E_x, E_y - ?$

$\vec{r} = x\hat{i} + y\hat{j} = 1.2\hat{i} - 1.6\hat{j}$

$r = \sqrt{x^2+y^2} = 2 \ m$

$E_x = -|\vec{E}| \cos\theta \quad ; \quad \cos\theta = \frac{AB}{|\vec{r}|} = \frac{1.2}{2} = 0.6$

$E_y = |\vec{E}| \sin\theta \quad ; \quad \sin\theta = \frac{AC}{|\vec{r}|} = \frac{1.6}{2} = 0.8$

$\Rightarrow$ $\boxed{E_x = -1080 \ N/C \quad E_y = 1440 \ N/C}$