1. Write down the (real) electric and magnetic fields for a monochromatic plane wave of amplitude E_0, angular frequency ω, and phase angle zero that is traveling in the $(0,1,1)$ direction and polarized in the $\hat{x}$ direction.

   Note: You are not given $\boldsymbol{k}$ or k so even the "space" part has to be in terms of ω.