

Below is an idealized picture of a traveling EM plane wave.  
It is a snapshot at  $t=0$ . (Wavelength  $\lambda$  is given, as is  $E_0$ .)

Write down a pair of mathematical formulae which describe this wave (in complex form) for all times. (One for  $\mathbf{E}$  and  $\mathbf{B}$ )

