

ekst
olur mu?

Homework II

In a source free and basic medium,
Electrical field is excited as

$$E_x = -i\omega\mu \frac{\pi}{b} \sin\left(\frac{\pi}{b}y\right) \sin\left(\frac{\pi}{h}z\right)$$

$$E_y = E_z = 0$$

Find the magnetic field of this monochromatic
wave and find the relation between
' ω ', ' b ', and ' h '.

Using

$$\nabla \times \vec{E} = -i\omega\mu \vec{H} \quad \text{and Helmholtz}$$