Given the wave solutions

$$\vec{E}\left(x,y,z,t\right) = \vec{E}_0\, \mathrm{e}^{i\left(\vec{k}\bullet\vec{r}-\omega t\right)}, \qquad \vec{B}\left(x,y,z,t\right) = \vec{B}_0\, \mathrm{e}^{i\left(\vec{k}\bullet\vec{r}-\omega t\right)}$$

What does Faraday's law $\vec{\nabla}\times\vec{E} = -\partial\vec{B}/\partial t$ tell us?

A) $\nabla\times\vec{E}_0 = -\dfrac{\partial\vec{B}_0}{\partial t}$

B) $\nabla\times\vec{E}_0 = i\omega\vec{B}_0$

C) $k\vec{E}_0 = \omega\,|\,\vec{B}_0\,|$

D) $\vec{k}\times\vec{E}_0 = \omega\vec{B}_0$

E) None of these!