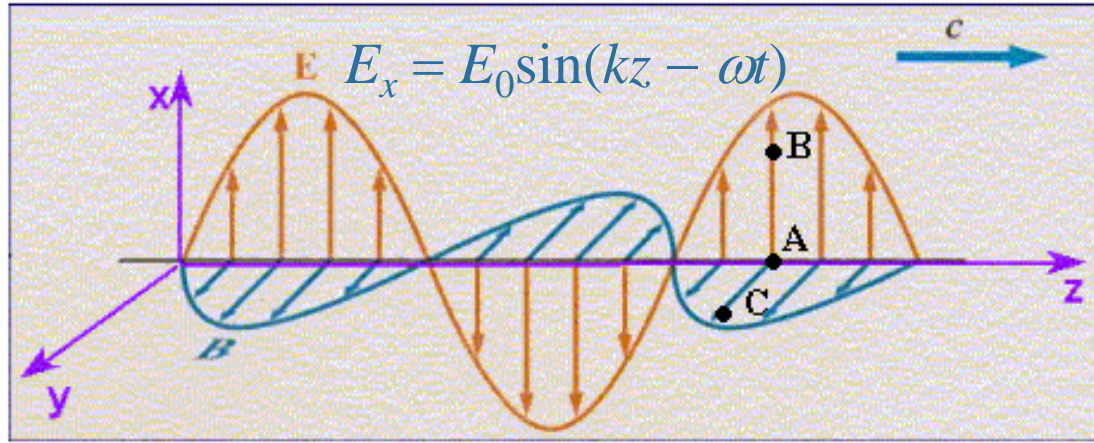


CheckPoint 2b

An electromagnetic plane-wave is traveling in the +z direction. The illustration below shows this wave at some instant in time. Points A, B and C have the same z coordinate.



Compare the magnitudes of the electric fields at points A and C

A. $E_A < E_C$

B. $E_A = E_C$

C. $E_A > E_C$

$$E = E_0 \sin(kz - \omega t):$$

E depends only on z coordinate for constant t .

z coordinate is same for A, B, C.

Electromagnetic Waves: Question 2 (N = 784)

