

Special Problem III.A-2

A plane wave is traveling in the \hat{x} direction. At a given time t and location $x = 1$ m, the phase of the electric field is 3π radians. At the same time, but at location $x = 2$ m, the phase of the electric field is 6π radians.

Find:

- a) The spatial frequency k of this wave.
- b) The angular frequency ω .
- c) The wavelength λ .