

# Chapter 1: General Properties of the Waves

## Wave Kinematics



- 1) What are their phase speeds?
- 2) What is the group speed of the modulation, and in which direction?

Consider a wave for which the amplitude function is given by

Given that the speed of propagation of this wave obeys

↳ show that this wave propagates in the  $x$  direction with speed  $c_x = \omega/k$ .