Quiz #1 Ch16

Name: ID#: Sec#:

Q1 The displacement of a string carrying a traveling sinusoidal wave is given by:

. At time t= 0 the point at x = 0 has a displacement of 0 and is moving in the positive y direction. Find the phase constant φ.

…………….. (1)

……………… (2)

Given At t = 0 and x = 0, y(0,0) = 0 and u(0,0) >0

From equation (1),

From equation (2)

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You can also determine what is the correct choice by making a graph of y(x,0)

t=t

t=0

φ=0

y(x,0)

φ=π

u(0,0)

x