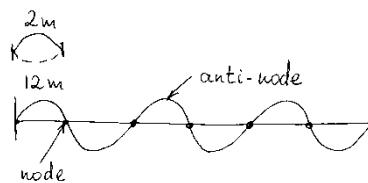Answer on Question #82090, Physics / Electromagnetism

Question:

A 2m long fixed string nodes at both ends when it vibrates in its fundamental mode if the distance between this nodes is 12m.what are nunber of (a) nodes (b)anti-nodes?

Solution:

The wave length equals $\lambda = 2*2 = 4$ (m), therefore in the second case we have 3 "full waves" . The distance between nodes is $\lambda/4$, it means there are 7 nodes and 6 anti-nodes.

The answer:

There are 7 nodes and 6 anti-nodes.