

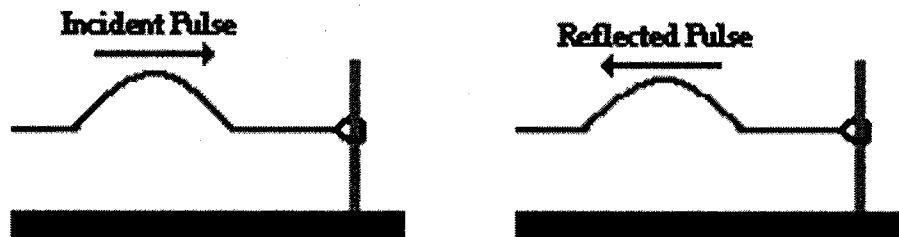
Wave Behaviour

A pulse is a _____ through a medium. A wave is just a _____.

When a pulse/wave travels from one medium to another, this pulse/wave is called the _____ pulse/wave. Some of the original pulse/wave's energy continues into the new medium; this is called the _____ pulse/wave. Some of the energy will be reflected back called the _____ pulse/wave.

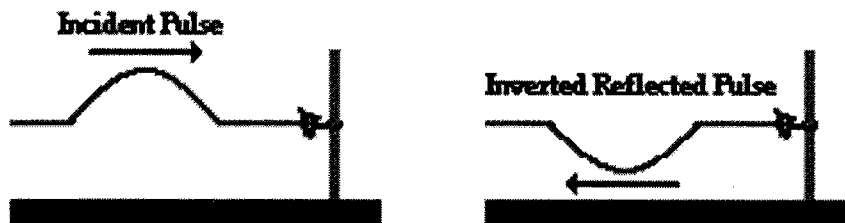
Free-End Reflection

If a pulse approaches a free-end boundary, the reflected pulse will be in the _____.

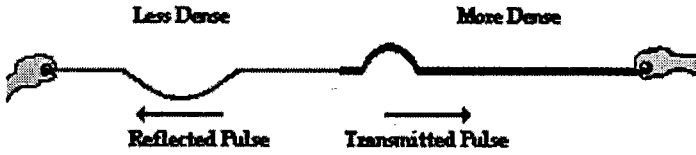
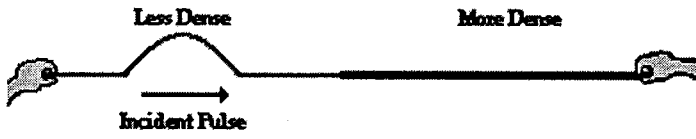


Fixed-End Reflection

If a pulse approaches a fixed-end boundary, the reflected pulse will be in the _____.



A Pulse/Wave Traveling From a Less Dense to a More Dense Medium



• _____

• _____

• _____

• _____

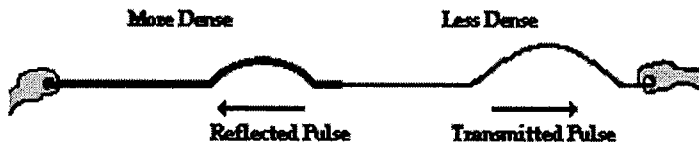
• _____

• _____

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A Pulse/Wave Traveling From a More Dense to a Less Dense Medium



• _____

• _____

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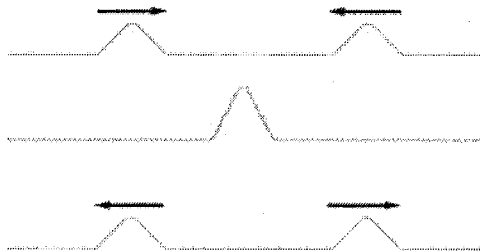
• _____

• _____

Wave Interference

Interference occurs when two or more pulses meet while traveling through the same medium. It is calculated by adding the amplitude of each pulse when they meet. This is known as _____ . There are two forms of interference.

1) Constructive Interference: Occurs when wave amplitudes are in the **same direction** (both inverted or both upright). The two (or more) waves **magnify each other** to make one larger wave (add the amplitudes together).



2) Destructive interference: Occurs when wave amplitudes are in **opposite directions**. The two (or more) waves' displacements (amplitudes) cancel each other out when they meet to make one smaller wave.

