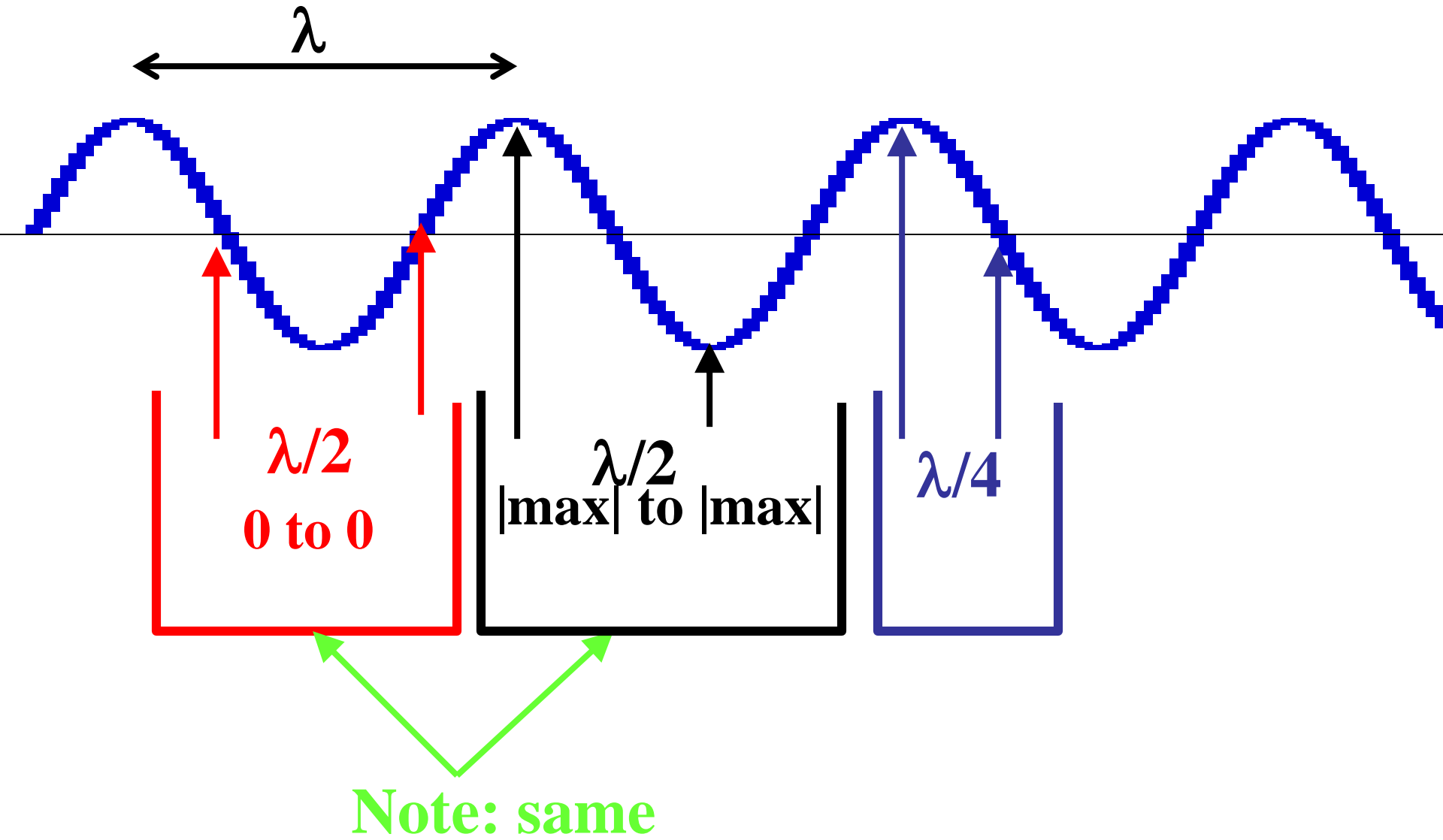
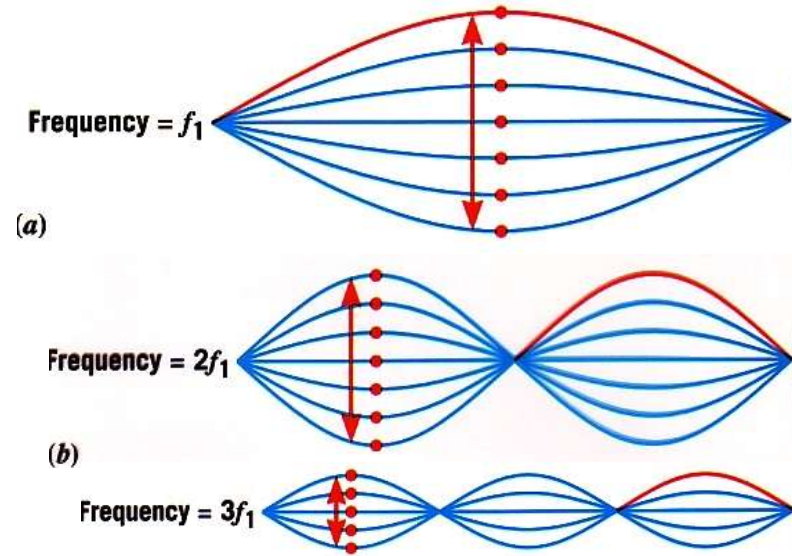
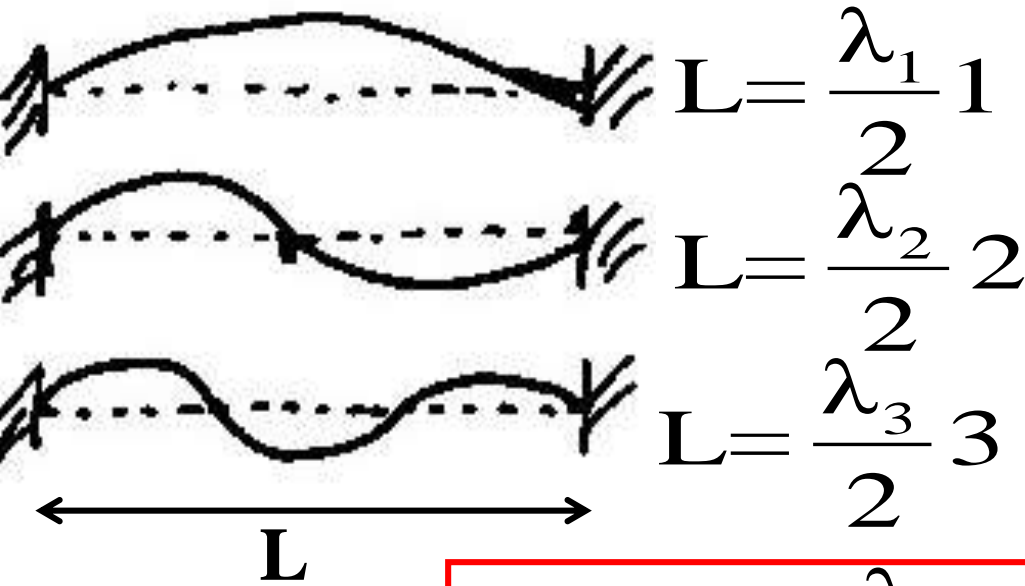


Review of standing waves on string



Standing Waves: e.g. string with fixed end points

BOUNDARY CONDITIONS: no amplitude at ends



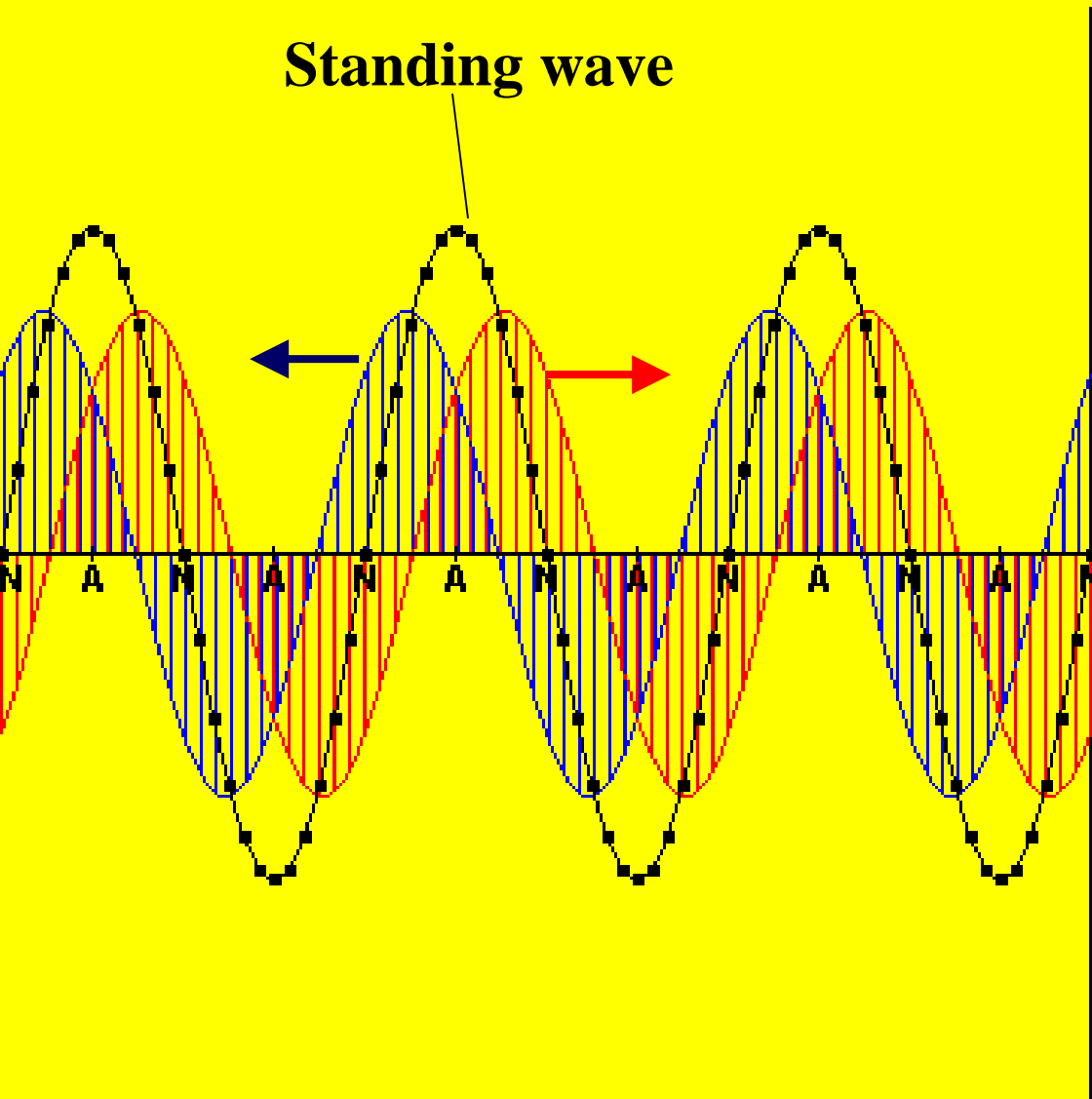
$$L = \frac{\lambda_n}{2} n$$
$$\lambda_n = \frac{2L}{n} \quad : n = 1, 2, 3, 4, \dots$$

$$v = \lambda_n f_n$$

$$f_n = \frac{v}{\lambda_n} = n \frac{v}{2L} = n f_1$$

Interference of **right** and **left** traveling waves to give standing wave.

Standing wave



Reflection

- from a fixed end
- from a free end



Reset



Pause

Slow motion

Animation

Single steps

T/8

Incidenting wave

Reflected wave

Resultant standing wave

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