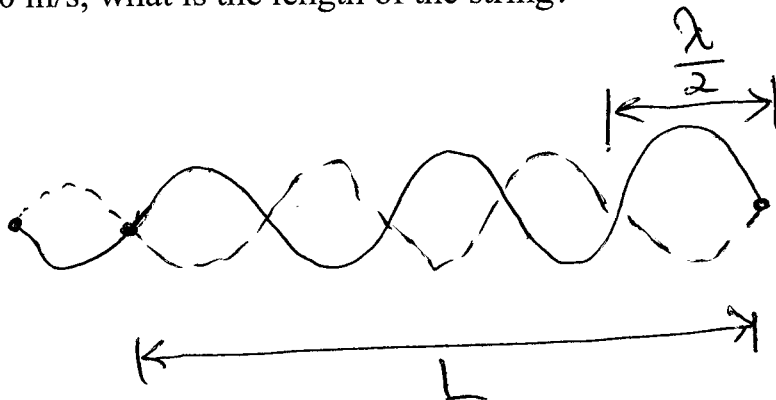


A vibrator having a frequency of 200 Hz generates a standing wave of six loops with amplitude  $2.0 \times 10^{-3}$  m of in a string clamped at both side. If the speed of the wave on the string is 100 m/s, what is the length of the string?



$$L = 3\lambda$$

$$v = \lambda f \Rightarrow \lambda = \frac{v}{f} = \frac{(100 \text{ m/s})}{(200 \text{ Hz})} = 0.500 \text{ m}$$

$$L = 3(0.500 \text{ m}) = 1.50 \text{ m}$$

04 Sep	11 Sep	18 Sep	25 Sep	2 Oct	9 Oct	23 Oct	30 Oct	6 Nov	13 Nov	20 Nov	27 Nov	4 Dec	11 Dec	18 Dec
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