

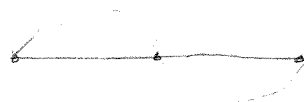
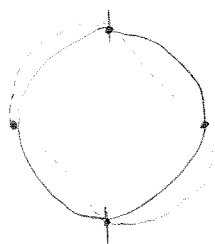
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$$L = 20.0 \text{ cm} = .20 \text{ m}$$

$$V = 900 \text{ m/s}$$

Standing Wave = 4 Nodes & 4 Antinodes



λ occurs across 3 nodes
(as in above diagram)

$$\text{So } \lambda = \frac{1}{2} \cdot \text{circumference}$$
$$= \frac{1}{2} (.20 \text{ m})$$

$$\lambda = .10 \text{ m}$$

Find f :

$$V = f \cdot \lambda$$

$$(900 \text{ m/s}) = f \cdot (.10 \text{ m})$$

$$f = 9000 \text{ Hz}$$