

## Information for the Quiz on Ch. Q1 & Q2

### Things You Must Know

- (1) Superposition Principle
- (2) Boundary conditions for standing waves
- (3) Conditions for constructive and destructive interference
- (4) Rayleigh criterion

### Potential Useful Equations

$$v = \lambda f$$

$$f = 1/T$$

$$\text{path difference} = d \sin \theta$$

$$a \sin \theta_{1d} = \begin{cases} \lambda & \text{single slit} \\ 1.22\lambda & \text{circular opening} \end{cases}$$

### Physical Constants

$$c = 3 \times 10^8 \text{ m/s}$$