*v = F* x *λ*

*λ* = wavelength, *Τ* = period, *F* = frequency, *A = amplitude*, *v* = speed of a wave

$$f=\frac{v\_{s}\pm v\_{ob}}{v\_{s}\mp v\_{sc}}f\_{o}$$

*vs =* speed of sound *, vob =* velocity of observer *, vsc =* velocity of source*, fo =* emitted frequency *, f =* observed frequency

$$∆l=mλ$$

$$∆l=(m+\frac{1}{2})λ$$

$$sinθ=m\frac{λ}{d}$$

$$sinθ=(m+\frac{1}{2})\frac{λ}{d}$$

$$y=Ltanθ$$

$$sinθ=m\frac{λ}{w}$$

$$\frac{1}{f}=\frac{1}{d\_{o}}+\frac{1}{d\_{i}}$$

$$M=\frac{h\_{i}}{h\_{o}}=-\frac{d\_{i}}{d\_{o}}$$

$$n\_{1}sinθ\_{1}=n\_{2}sinθ\_{2}$$

$$n\_{1}v\_{1}=n\_{2}v\_{2}$$