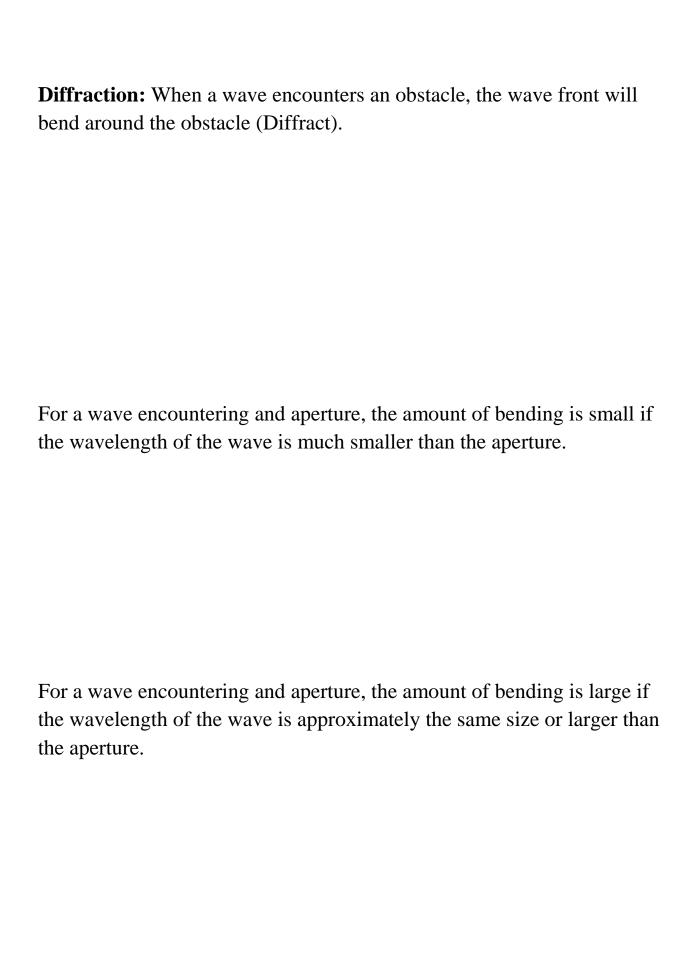
Waves II

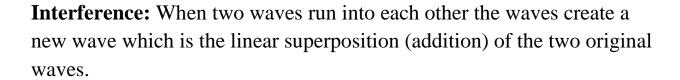
Properties of Waves

Reflection – When a wave encounters the interface between two media, some or all of the wave may be reflected.
Phase is not changed if pulse on a rope strikes a less dense medium.
Phase is changed 180 degrees (inverted) if pulse of a rope strikes a more dense medium.

Law of Reflection: When a wave strikes an interface, the angle of incidence measured to the normal of the interface is equal to the angle of reflection.

Refraction: If a wave strikes an interface between two media where it has different speeds, the transmitted wave will be bent (i.e. refracted).
Snell's Law of Refraction:





If we have two waves traveling in the same direction with the same frequency and wavelength, this interference can cause either a larger wave (constructive interference) of a smaller wave (destructive interference). This is a uniquely wave phenomenon (tell-tale sign that you are dealing with waves).