Our problem is to show how light wave is acting when it hits from one medium to another medium, with polarization analysis included.

This procedure contains 2 part:

1. Snell’s law shows the direction of the light after reflection and refraction.
2. Fresnel Equation shows the energy relationship of s- and p- polarized electromagnetic wave when it hits at the interface. (reflectivity, transmissivity, and so on)

First we can achieve the Snell’s law, which gives the direction of the reflected and transmitted light.

