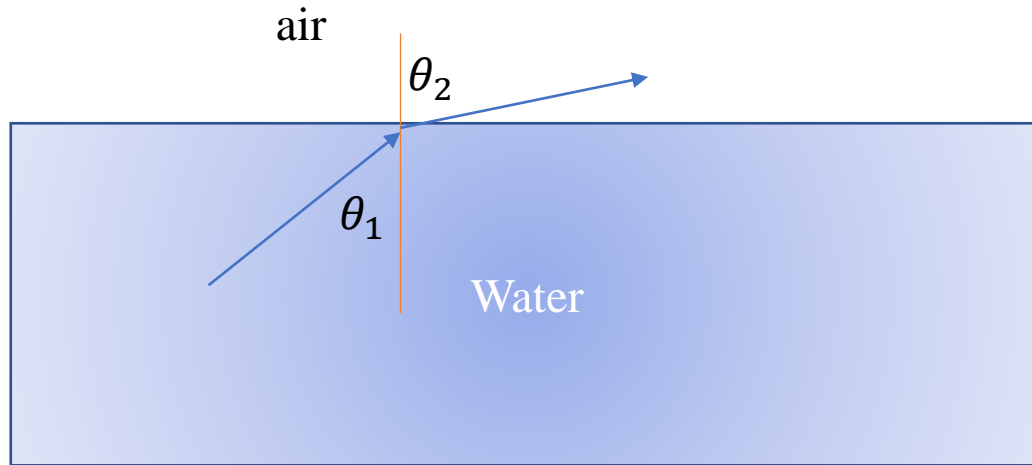


Q. A light ray with an angle of incidence of  $35^\circ$  passes from water to air. Find the angle of refraction using Snell's Law . The Refractive index of water is 1.333 and air is 1.



◆ From water to air

◆ Incidence medium is water and refractive medium is air

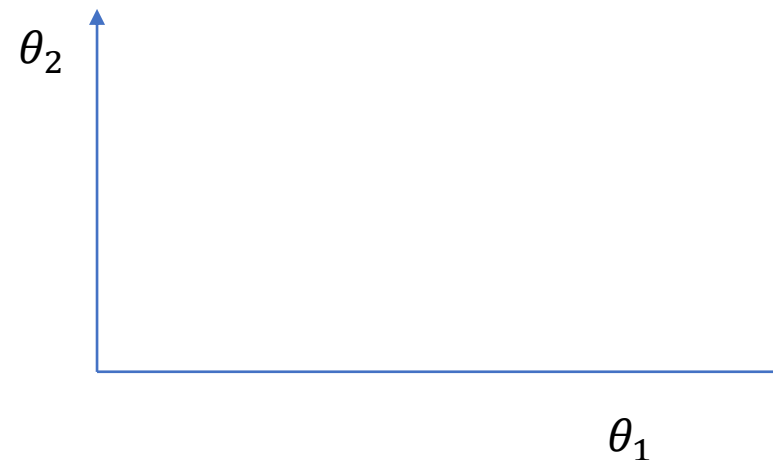
Snell's Law

$$n_1 \sin \theta_1 = n_2 \sin \theta_2$$

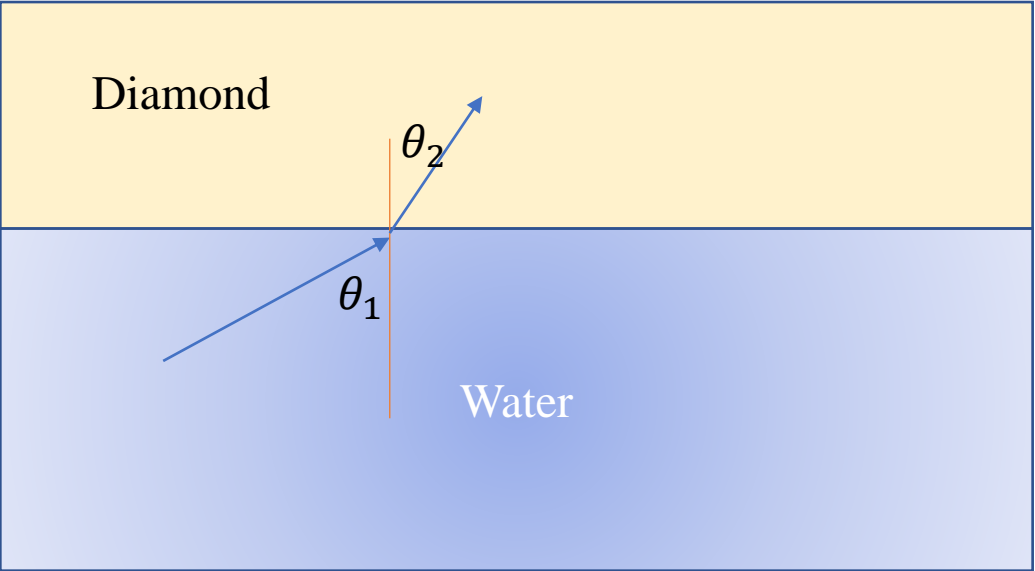
$$\theta_2 = ?$$

◆ If we change angle of incidence from  $0^\circ$  to  $90^\circ$  determine angle of refraction make a graph and table

| $\theta_1$ | $\theta_2$ |
|------------|------------|
|            |            |
|            |            |
|            |            |
|            |            |
|            |            |



Q. A light ray passes from water to diamond with an angle of incidence of 75°. Calculate the angle of refraction. The refractive angle of incidence is 1.333 for water and 2.42 for diamond.



- ◆ From water to Diamond
- ◆ Incidence medium is water and refractive medium is air

Snell’s Law

$$n_1 \sin \theta_1 = n_2 \sin \theta_2$$

$$\theta_2 = ?$$

◆ If we change angle of incidence from 0°to 90° determine angle of refraction make a graph and table

| $\theta_1$ | $\theta_2$ |
|------------|------------|
|            |            |
|            |            |
|            |            |
|            |            |
|            |            |

