LAW OF REFRACTION EXPLAINED

$$\frac{\sin\theta^1}{\sin\theta^2} = \frac{n^2}{n^1} \quad \text{- or - } \quad n^1 \times \sin\theta^1 = n^2 \times \sin\theta^2$$

The law of refraction (Snell's law) is described by the equations above.

As light crosses the boundary between two transparent media, the law of refraction (Snell's law) states the relationship between the angle of incidence and angle of refraction of the light with reference to the refractive indices of both of the materials.

$\sin\theta^1$	=	Sine of the angle of incidence	e.g. Sine of 45^0 = 0.7071
$\sin\theta^2$	=	Sine of the angle of refraction	e.g. Sine of 37^0 = 0.6018
n^1	=	Refractive index of first medium	e.g. Refractive index of Air = 1.000293
n^2	=	Refractive index of second medium	e.g. Refractive index of Crown glass = 1.52

The term refractive index of a medium is the same as its index of refraction.
Use Snell's law to calculate the angle of incidence or refraction for lenses, prisms and everyday materials.