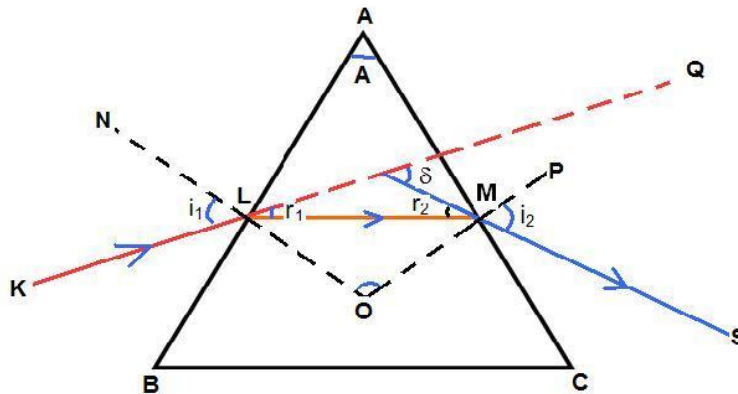


Refraction of Light through a Prism



ABC – a triangular base of a prism

AB, BC – two inclined lateral rectangular surfaces of a prism

A - Angle of prism – the angle between two lateral surfaces of the prism

NO – Normal of first refracting surface AB

PO – Normal of second refracting surface BC

KL – incident ray

MS – emergent ray

LM – refracted ray

Angle of incidence (i_1)

Angle of refraction (r_1)

Angle of emergence (r_2)

Angle of deviation (δ)

1. A glass prism has two triangular base and three rectangular lateral surfaces.
2. The angle between two lateral surfaces is called angle of prism (A).

3. Triangle ABC represents a prism.
4. From the air medium to glass medium:
5. A ray of light enters from air to glass at the first surface AB.
6. It refracts towards the normal since the second medium is denser (glass).
7. The refracted ray emerges in the second surface after second refraction from denser to rarer medium (glass to air).
8. Hence the emergent ray bends away from the normal at the second surface BC.
9. Angle of deviation – the angle between the (extrapolated) incident ray and the (extrapolated) emergent ray.