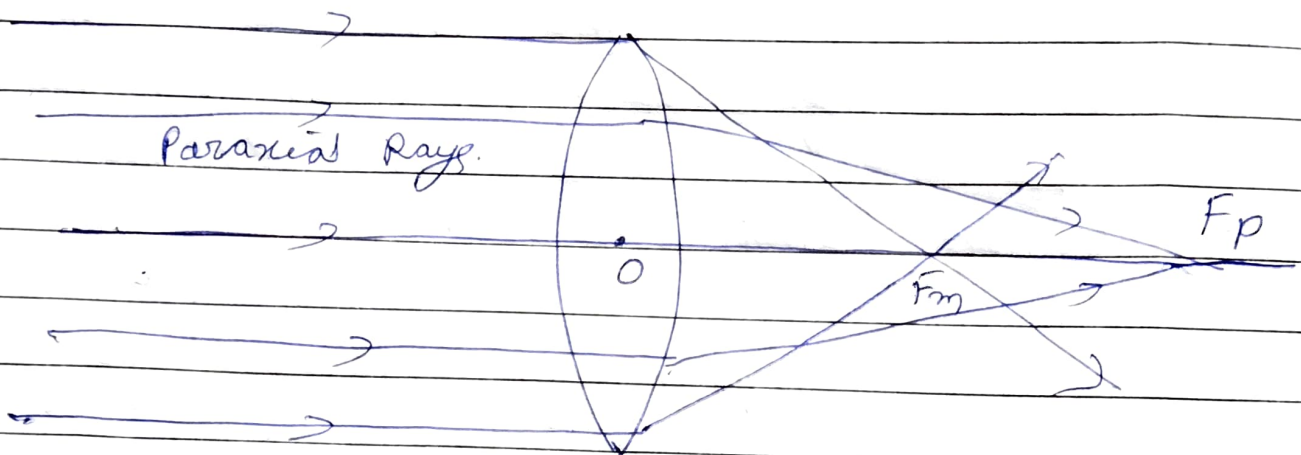


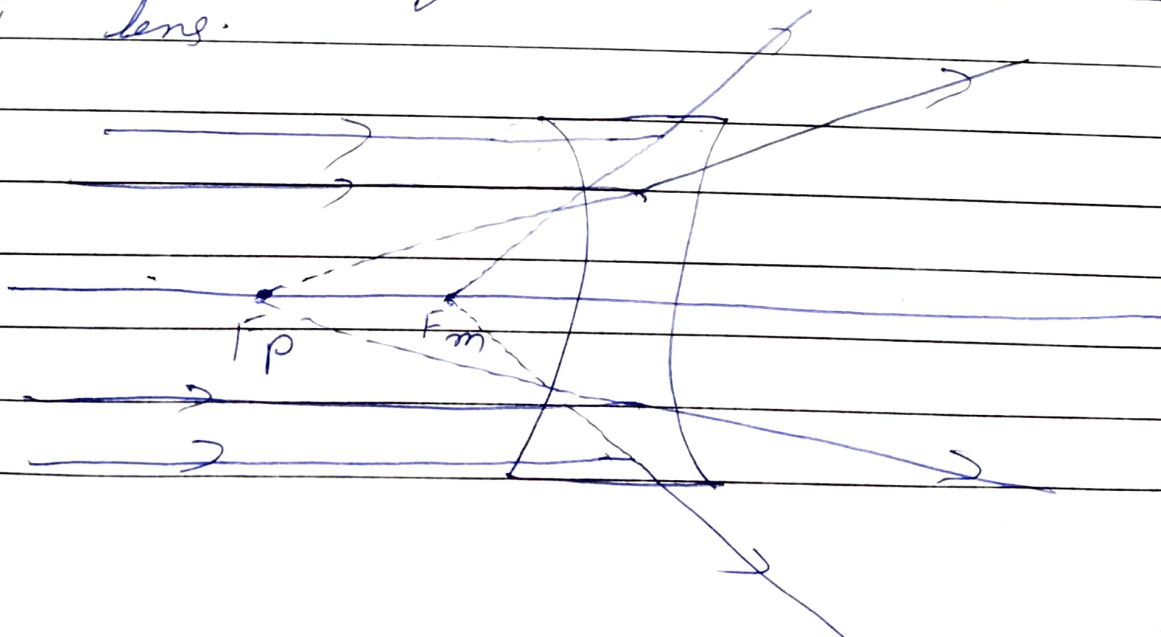
Spherical Aberration →

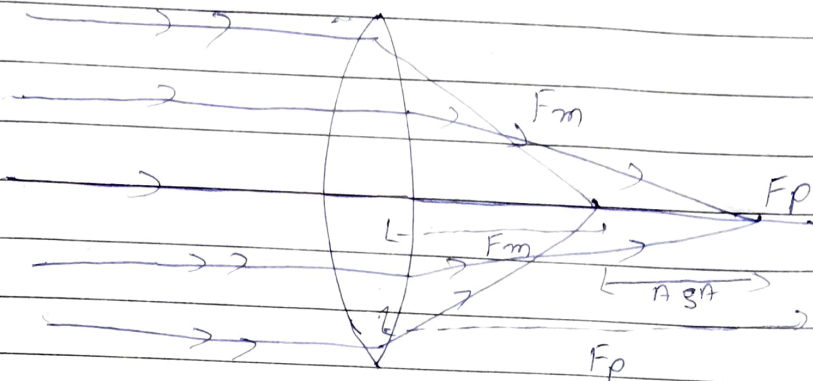
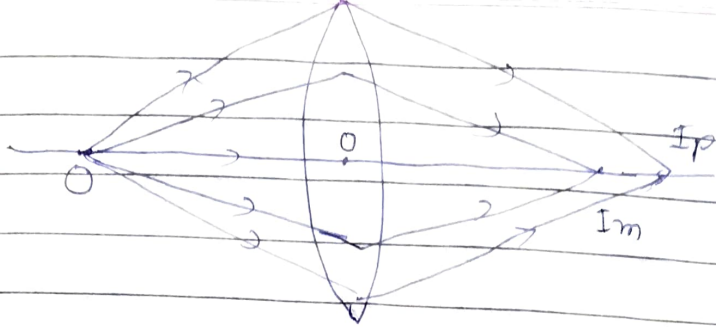
The incident Rays which are incident near to the axis of lens are called paraxial rays.

These Rays are less deviated by lens.



The incident rays which are incident at the edges of lens are called marginal rays. These rays are more deviated by lens.





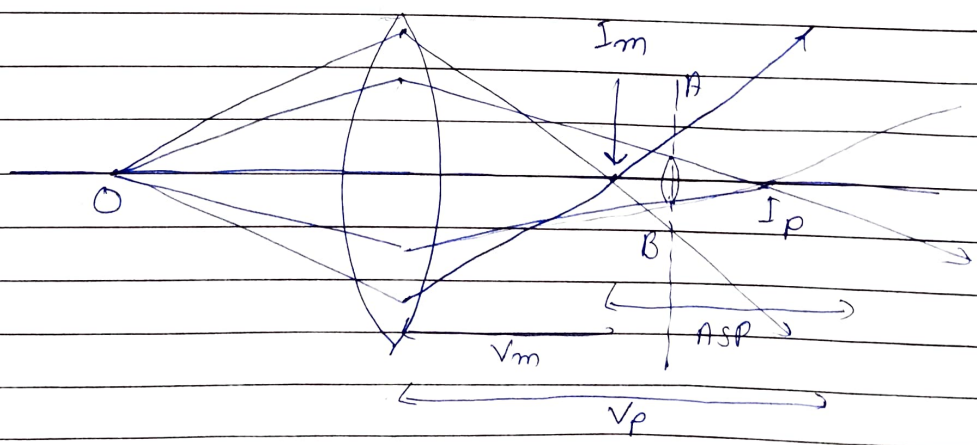
Axial spherical Aberration

$$ASA = F_p - F_m$$

The distance between I_p and I_m is called longitudinal spherical aberration / axial spherical aberration.

$$ASA = v_p - v_m$$

The radius of circle of least confusion is called lateral spherical aberration.



If the screen is placed perpendicular to the axis at AB then the image appears to be a circular patch of diameter AB.

This patch of diameter AB is called circle of least confusion.