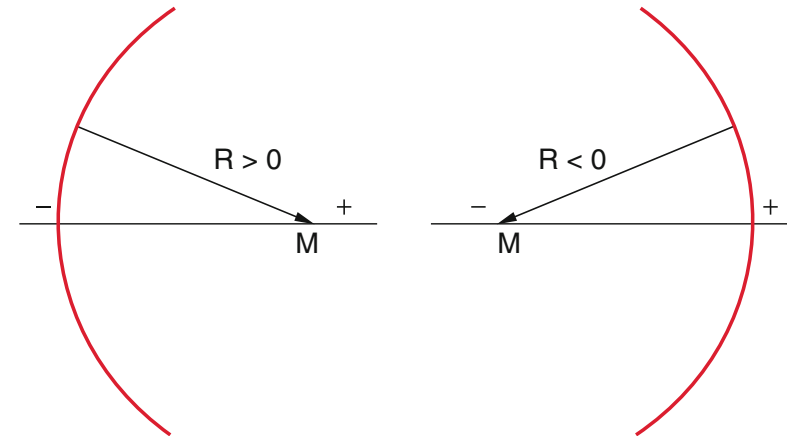
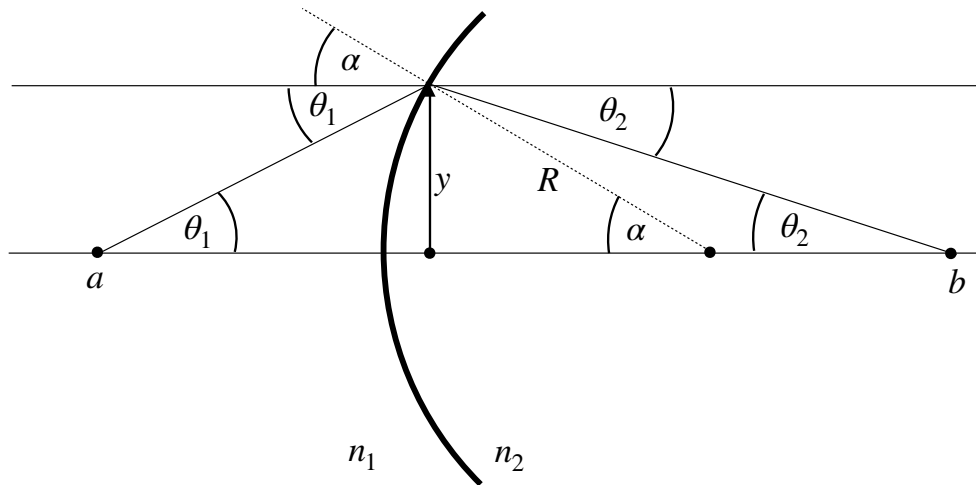


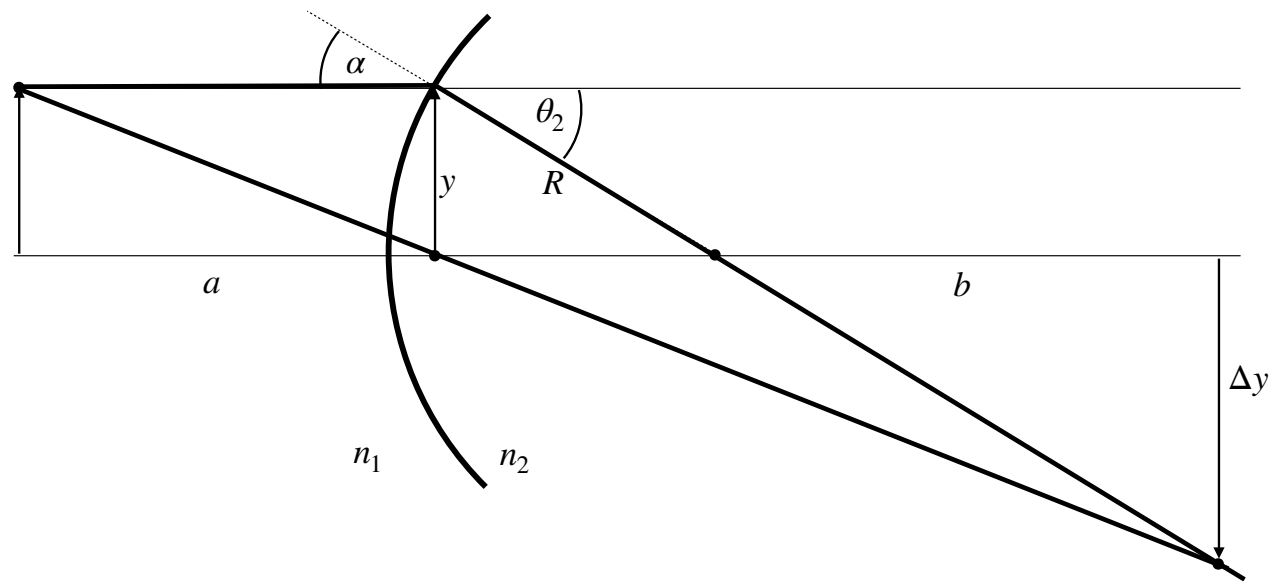
Experimental Physics 3 - Em-Waves, Optics, Quantum mechanics

Lecture 3

Curved Interfaces

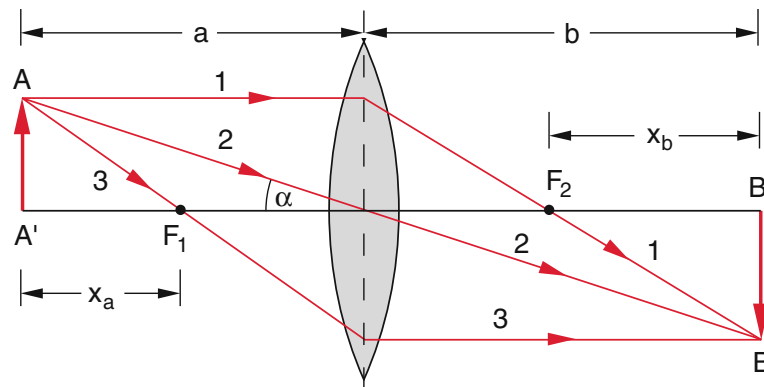


Focal length of a curved surface

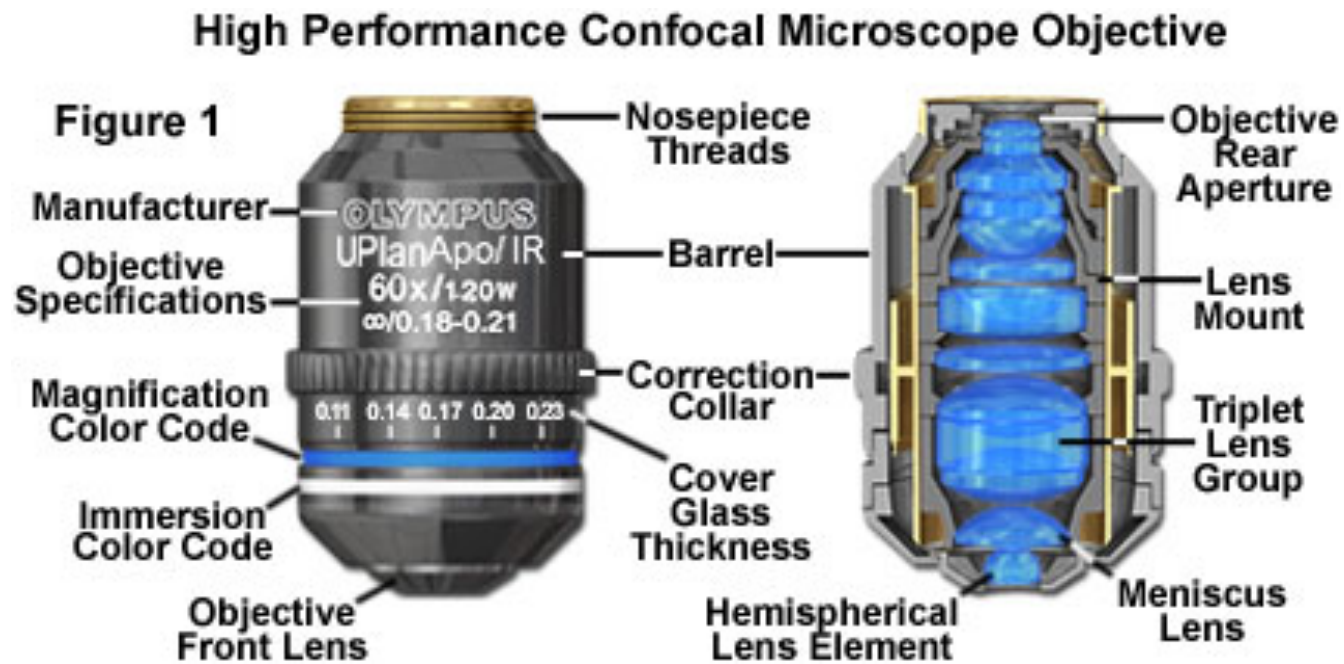


Lenses

thin lens

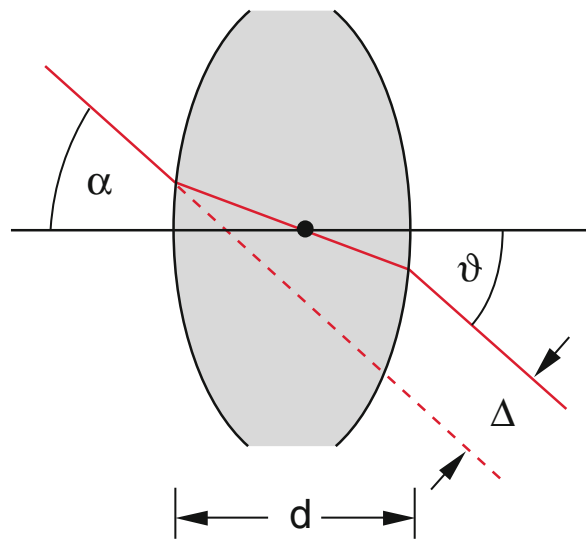


Microscopy objective lens

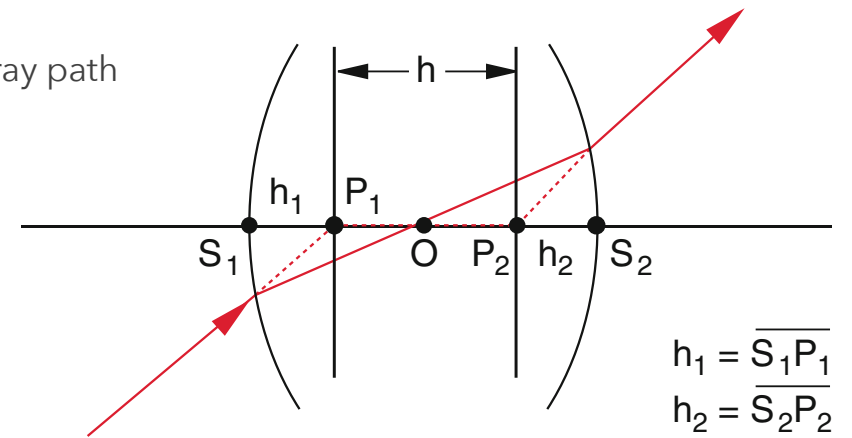


Lenses

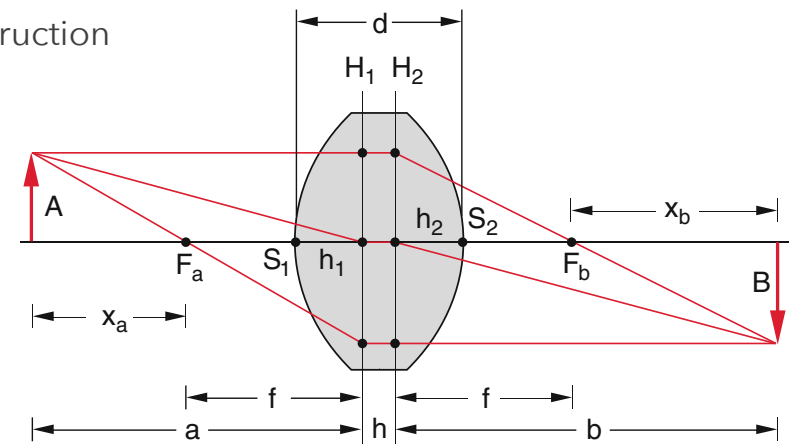
thick lens



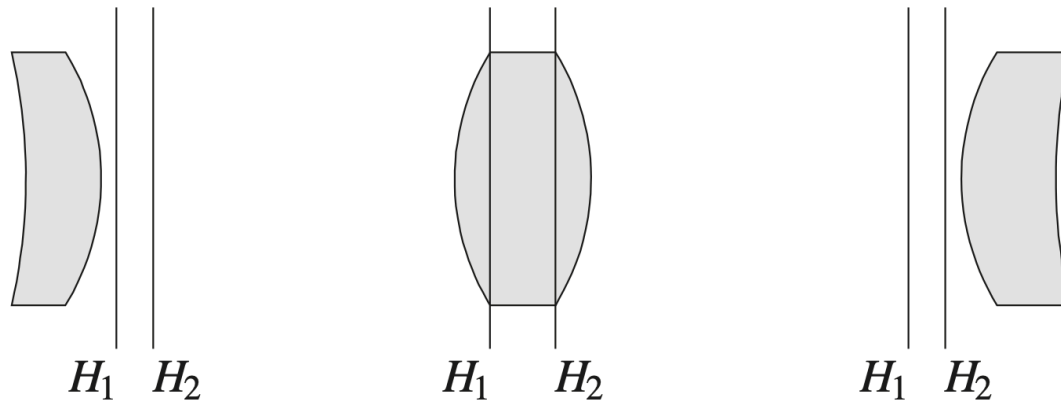
replacement ray path



geometrical construction



Thick lens



Position of the principal planes for varying lens thickness

Lens types

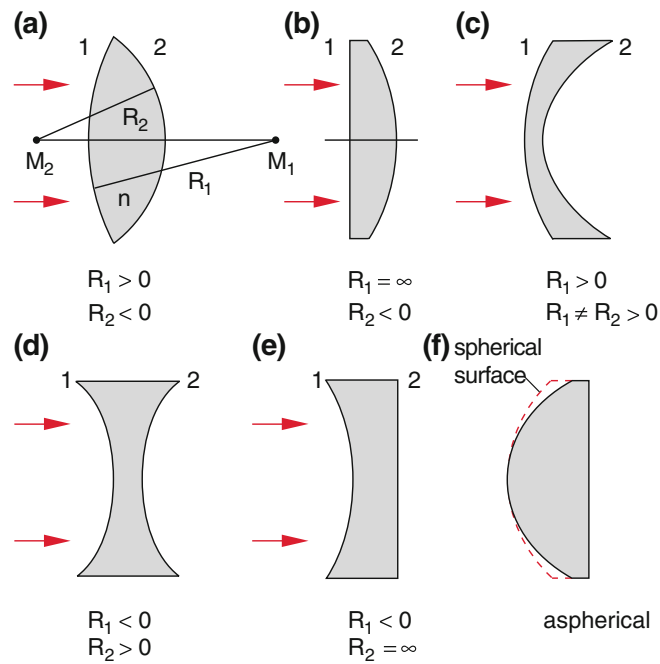


Fig. 9.26 Examples of different forms of lenses: **a)** convex-convex = biconvex **b)** plane-convex **c)** convex-concave **d)** biconcave **e)** concave-plane **f)** aspherical lens

Rainbow

single water drop

