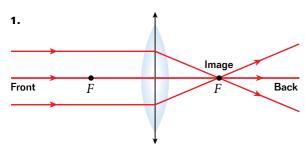
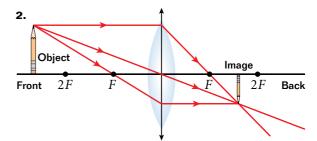
Ray diagrams

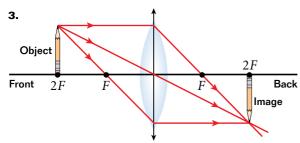


Configuration: object at infinity; point image at *F* **Applications:** burning a hole with a magnifying glass



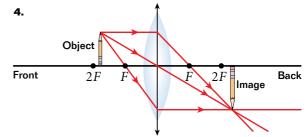
Configuration: object outside 2*F*; real, smaller image between *F* and 2*F*

Applications: lens of a camera, human eyeball lens, and objective lens of a refracting telescope



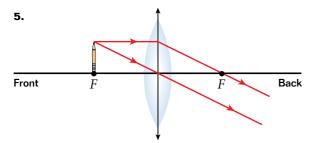
Configuration: object at 2*F*; real image at 2*F* same size as object

Applications: inverting lens of a field telescope



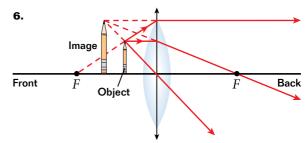
Configuration: object between *F* and 2*F*; magnified real image outside 2*F*

Applications: motion-picture or slide projector and objective lens in a compound microscope



Configuration: object at *F*; image at infinity

Applications: lenses used in lighthouses and searchlights



Configuration: object inside *F*; magnified virtual image on the same side of the lens as the object

Applications: magnifying with a magnifying glass; eyepiece lens of microscope, binoculars, and telescope