	S (object distance)	f (focal length)	R (Radius of Curvature)	S' (image distance)
MIRROR	+ real object (in front of mirror)	+ Concave mirror	+ concave mirror	- virtual image (back of mirror)
	- virtual object (back of mirror)	- convex mirror	- convex mirror	+ real images (in front of mirror)
LENS	+ real object (in front of lens)	+ convex lens (thicker at center)	+ convex toward the object	+ real images (back of lens) (opposite side as object)
	- virtual object (back of lens)	- concave lens (thinner at center)	- concave toward the object	- virtual image (in front of lens) (same side as object)

Ray tracing for a converging lens:
a.   A ray parallel to the axis refracts through the focal point
b.   (s>f) A ray that enters the lens along a line through the near focal point emerges parallel to the axis
     (s<f) A ray along a line passing through the near focal point refracts parallel to the optical axis
c.   A ray through the center of the lens does not bend

Ray tracing for a diverging lens:
a.   A ray parallel to the axis diverges along a line through the near focal point
b.   A ray along a line through the far focal point emerges parallel to the optical axis
c.   A ray through the center of the lens does not bend