

"parallel, through f"; "through f, parallel"

Locating a Lens Image by Ray Tracing

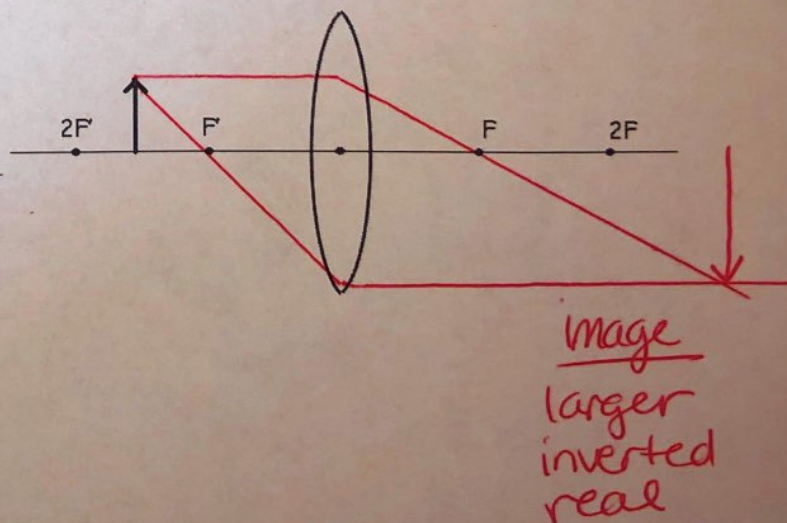
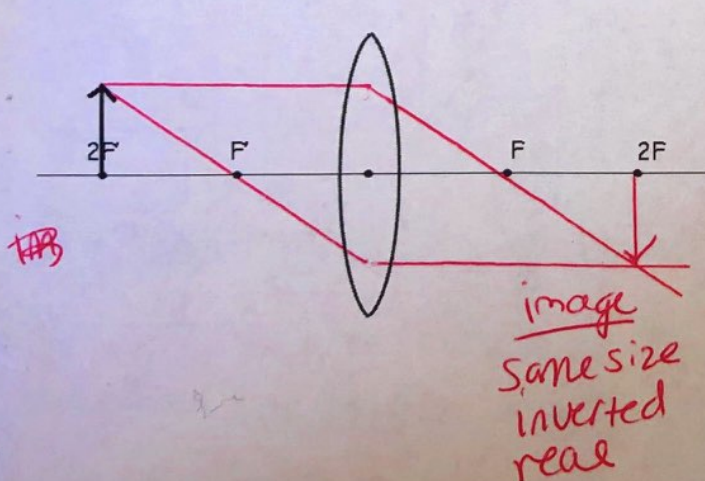
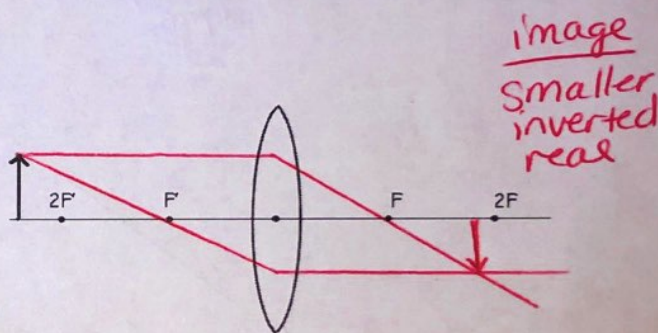
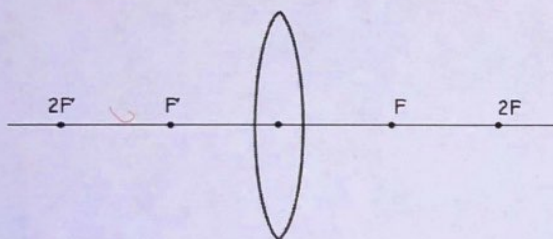
An image will be located at the intersection of two refracted rays. Only two of the following 3 rays are required.

Ray 1: Draw the incident ray from the top of the object through the virtual focal point (F') until it strikes the lens. Draw the refracted ray parallel to the principal axis.

Ray 2: Draw the incident ray from the top of the object parallel to the optical axis until it strikes the lens. Draw the refracted ray through the real focal point.

Ray 3: Draw the incident ray from the top of the object through the optical center.

Convex Lenses:



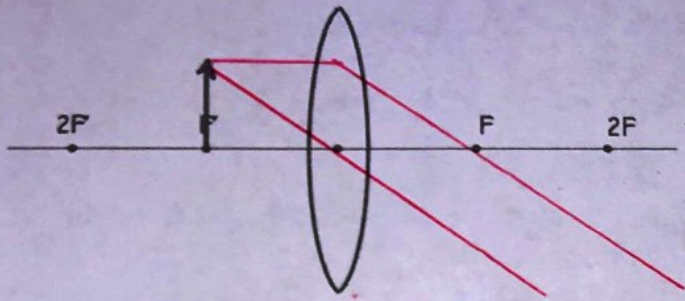


image
 No image
 light rays do not
 converge.

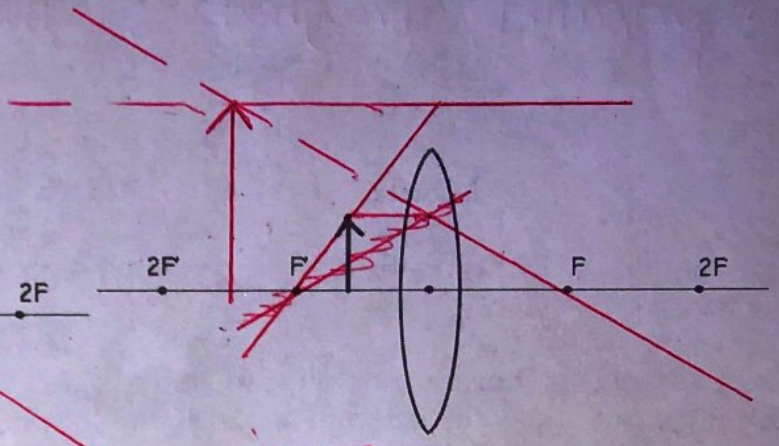


image
 Virtual
 larger
 upright

Concave Lens:

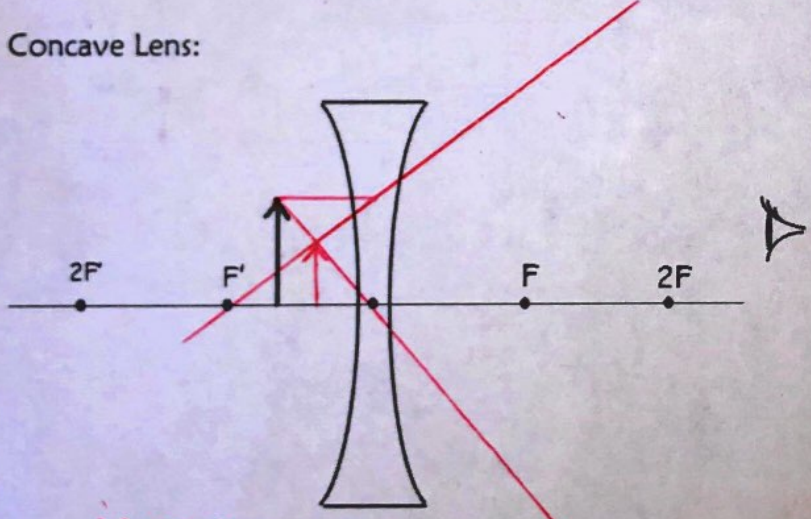


image
 smaller
 virtual
 upright