

PhyzJob: Ray Tracing 3

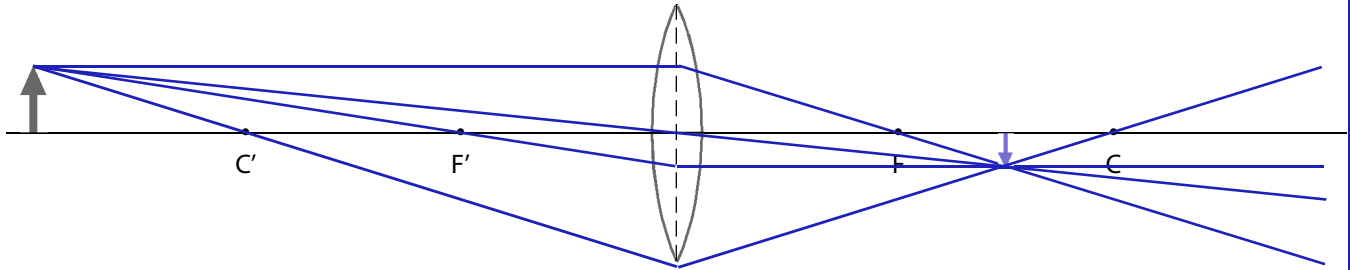
Images in a Converging Lens



INSTRUCTIONS:

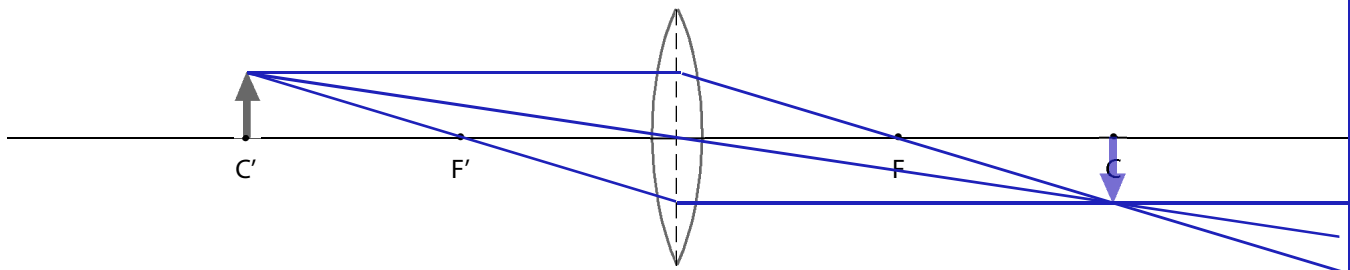
- a. Determine the location and size of the image by means of a ray diagram. Use *any two principal rays* to locate the image. (It's always a good idea to use a third principal ray to verify the image location.)
- b. Draw the image.
- c. Indicate whether the image is upright or inverted, enlarged or reduced, and real or virtual.

1. The object distance is greater than the radius of curvature ($o > r$).



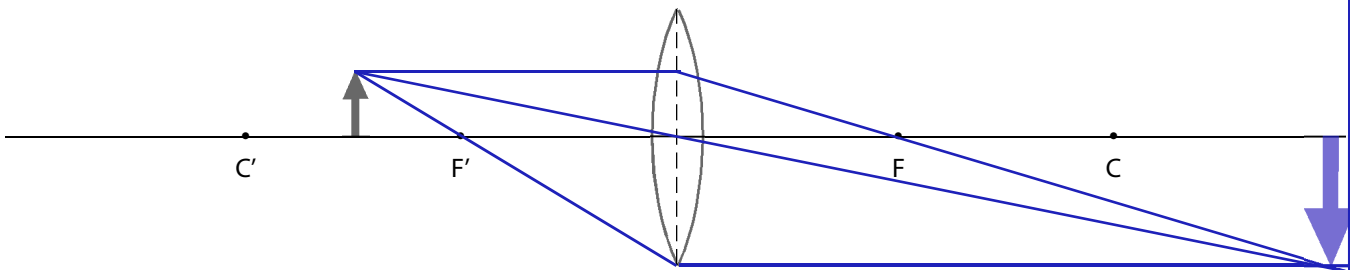
The image is upright inverted, enlarged reduced, and real virtual.

2. The object distance is equal to the radius of curvature ($o = r$).



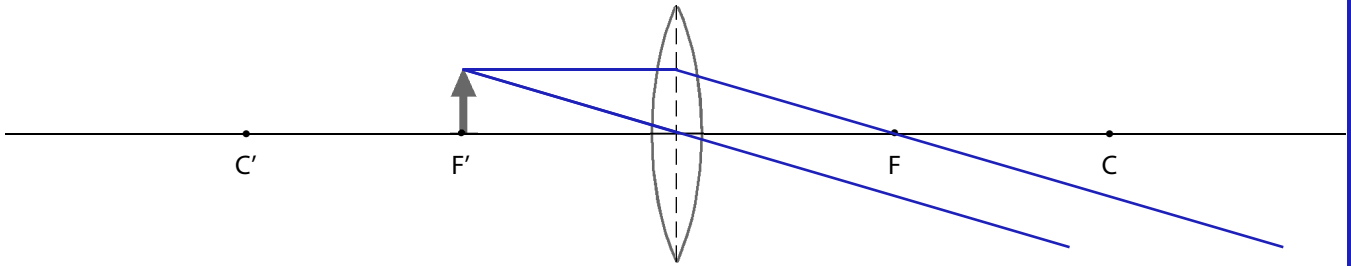
The image is upright inverted, enlarged reduced, and real virtual.

3. The object distance is less than the radius of curvature but greater than the focal length ($r > o > f$).



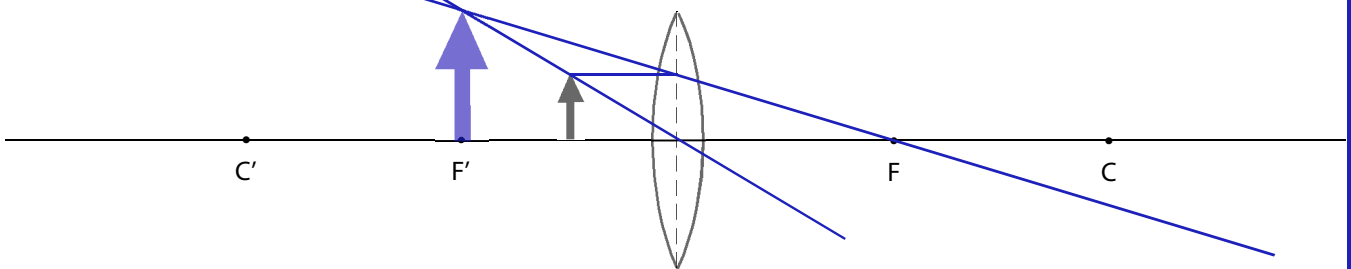
The image is upright inverted, enlarged reduced, and real virtual.

4. The object distance is equal to the focal length ($o = f$).



The image is __upright __inverted, __enlarged __reduced, and __real __virtual.

5. The object distance is less than the focal length ($o < f$).



The image is __upright __inverted, __enlarged __reduced, and __real __virtual.