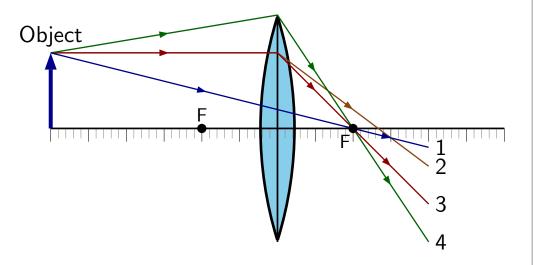
15 April 2019 Phys 112 Spring 2019

## Question 1

An object is placed to the left of a convex lens with focal point as illustrated. Several rays are traced from the tip of the object through the lens.

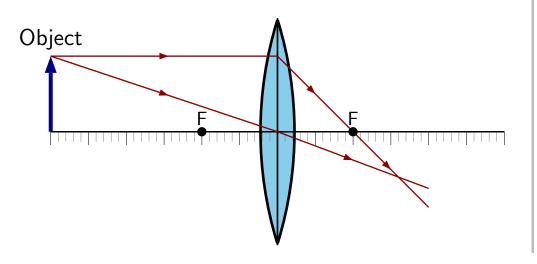
Which of the rays is drawn correctly?



15 April 2019 Phys 112 Spring 2019

## Question 2

An object is placed to the left of a convex lens with focal point as illustrated. Two rays are traced from the tip of the object through the lens and indicate the location of the image.



As the object is shifted closer toward the left focal point, which of the following is true?

- 1. The location and height of the image remain fixed.
- 2. The image gets closer to the lens and its height decreases.
- 3. The image gets closer to the lens and its height stays constant.
- 4. The image gets further from the lens and its height increases.
- 5. The image gets further from the lens and its height decreases.