

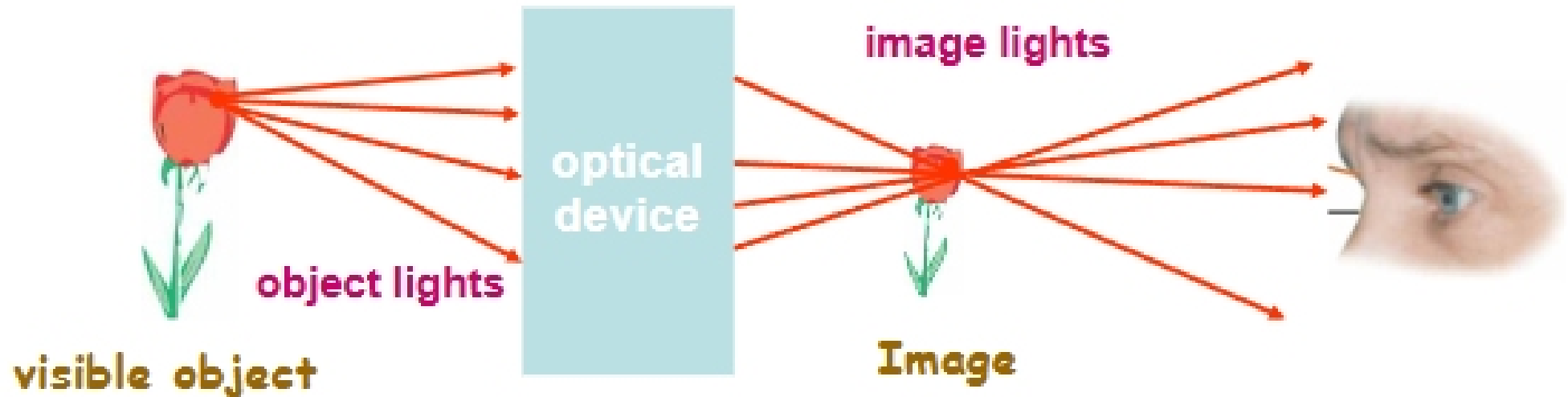
# Physics 202, Lecture 24

## Today's Topics

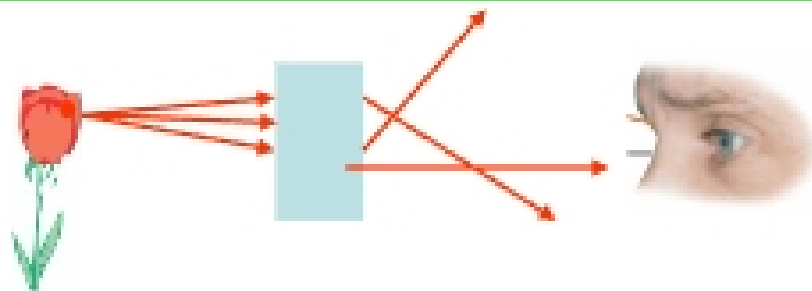
- Image Formation
  - Real Image, Virtual Image, and No Image
  - Ray Diagram
  - Images Formed by:
    - Mirrors (reflection)
      - Concave and Convex
    - Lenses (refraction)
      - Converging and Diverging

# Imaging

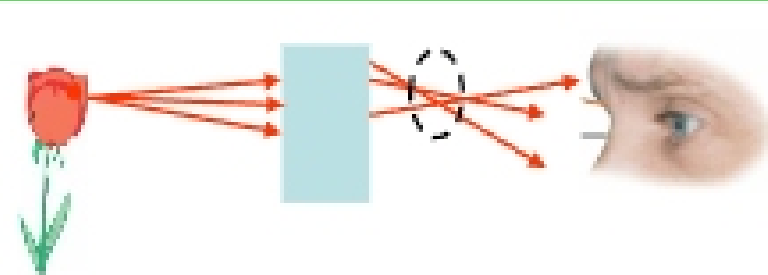
□ Imaging: visible object → optical device → image



Note: If image can be formed, only two rays per point are necessary



**No Image:**  
No point to point  
correspondence

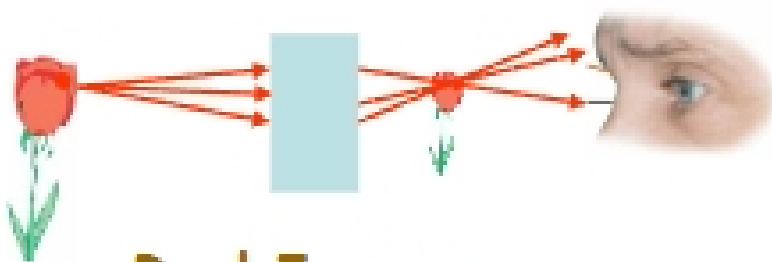


**Image Aberration:**  
Poorly focused  
imaged points

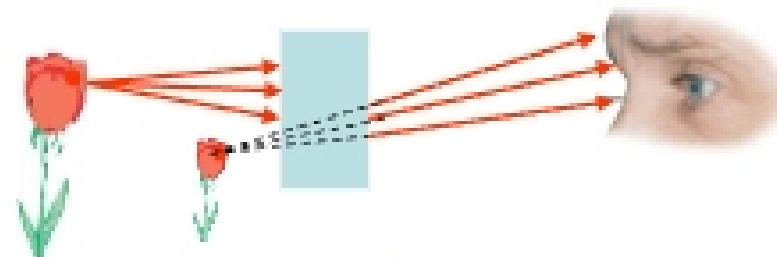
# Image Properties

- Image properties to be concerned include
  - location, real/virtual, reduced/enlarged, upright/inverted, similar/distorted,...

## Real and Virtual Images



**Real Image:**  
image lights  
actually pass  
through image



**Virtual Image:**  
image lights appear  
to have come from  
the image

➤ Real images can be formed on a screen.