2.2 Lens and Mirror Properties

Ray Diagrams

Information about the images formed by the lens can be obtained by drawing two of the following rays:

- The ray parallel to the principal axis is refracted through the principal focus, F.
- A ray through the optical center, C, which is undeviated for a thin lens.
- A ray through the principal focus, F, which is refracted parallel to the principal axis.

Magnification

The linear magnification M is:

$$\text{Linear magnification} = \frac{Image\ Size}{Object\ Size}$$

$$\text{Linear magnification} = \frac{Distance\ of\ image\ from\ lens}{Distance\ of\ object\ from\ lens}$$

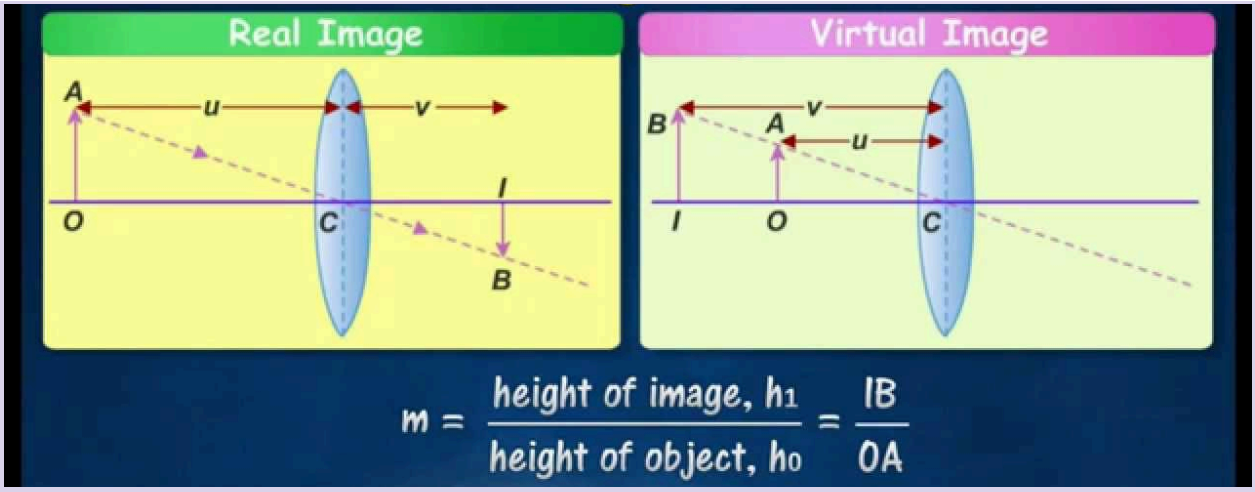

Image credit: https://www.youtube.com/watch?v=IMDfLJL3qEY