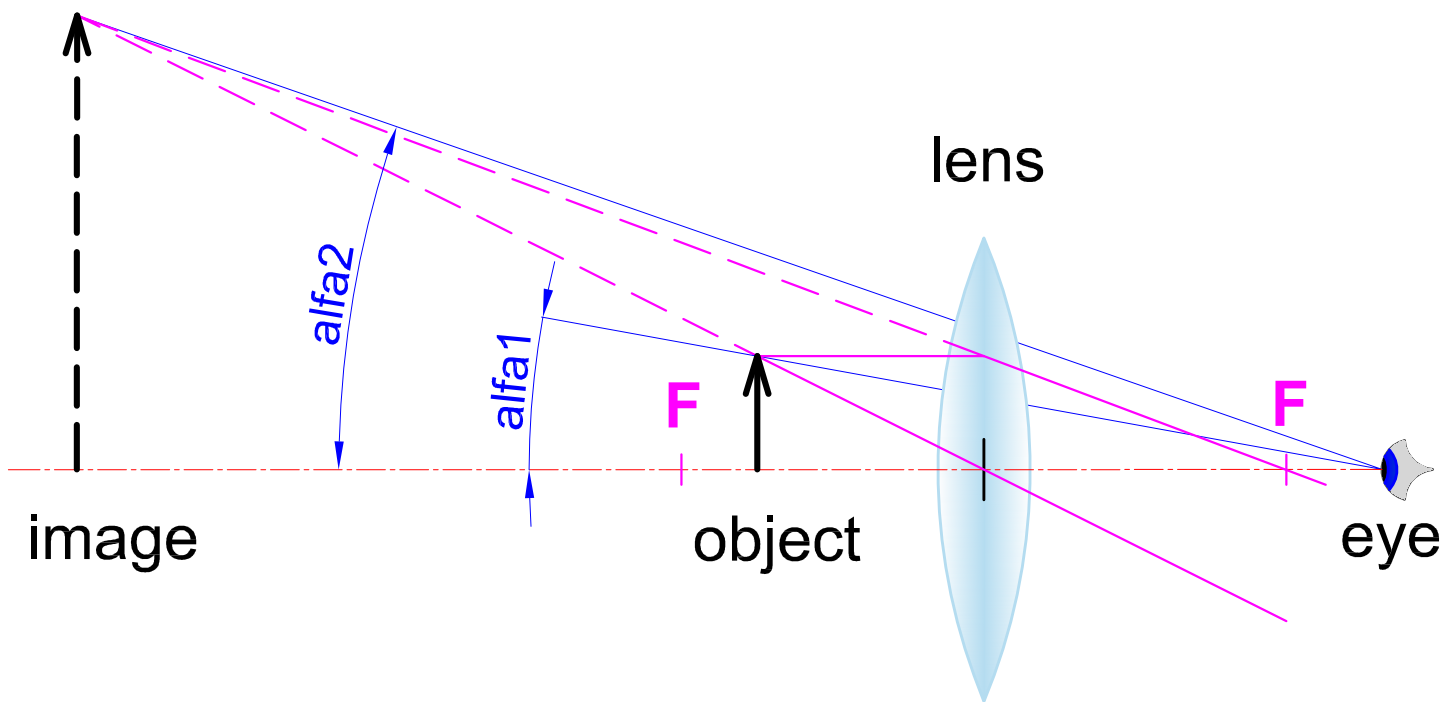


# Magnifying glass



- $F$  [m] - focal length
- $S_{np} = 1/4$  [m] - standard near point
- $\Phi = 1/F$  [1/m] - optical power in dioptries

## Magnifying power - angular magnification

*Lens close to the object (one focal length away)*

*The eye can be a larger distance away*

$$MP = \text{alfa2}/\text{alfa1} = S_{np} * \Phi = S_{np}/F$$

## Maximum magnifying power - typically denoted " $m\times$ "

*Lens very close to the eye*

$$MP_o = MP + 1 = m$$

*Valid for thin lenses only*

*drawing by: Adam Wiktor Kamela*