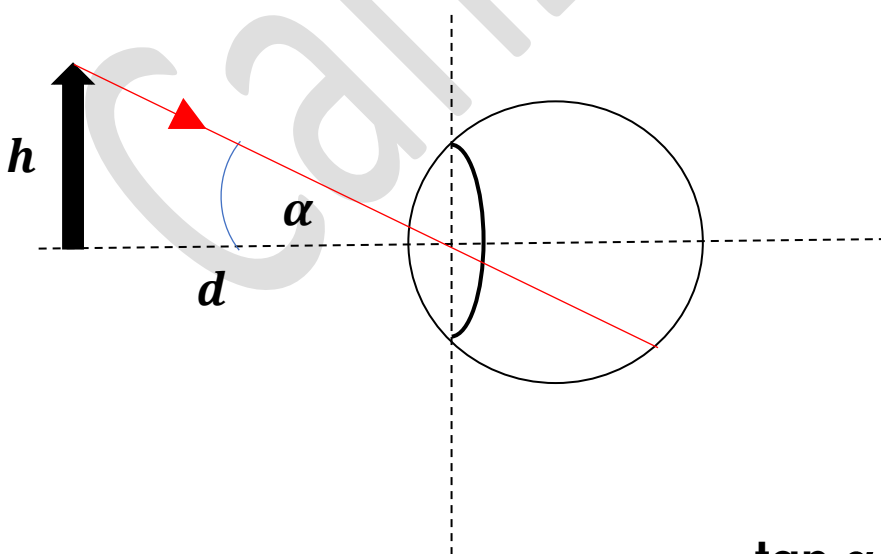


Human Eye

- Eye creates a **real, inverted image** in the retina.
- Eye lens can change its power by changing its shape using ciliary muscle.
- A normal healthy eye can focus objects from **25cm to Infinite**.
- **When eye is focusing an object in infinite, the focal length of the Eye is at its maximum. And the power is at the lowest.** Also, the Eye is in relaxed mode.
- Exactly, **Infinite means a long distance**. Don't need to think much about that.

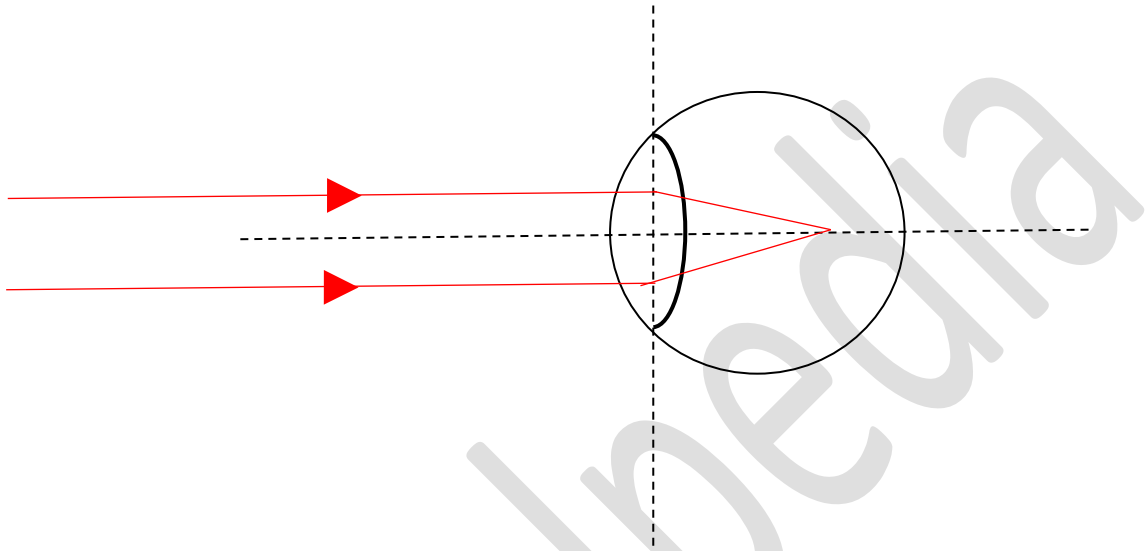
- **Visual angle (α)**



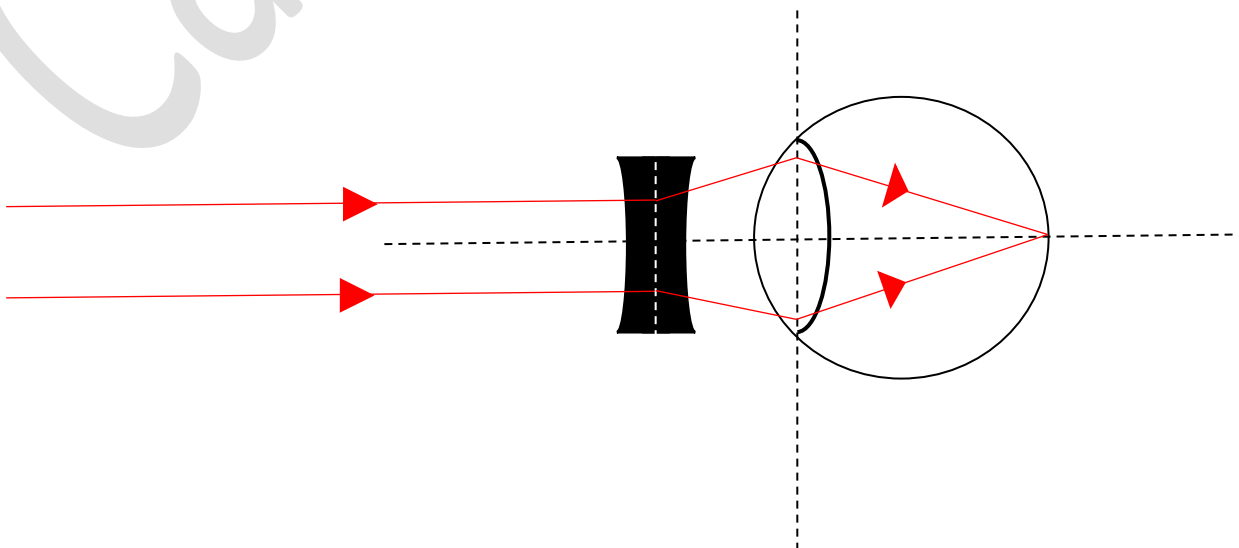
$$\tan \alpha = \frac{h}{d}$$

- Eye defects

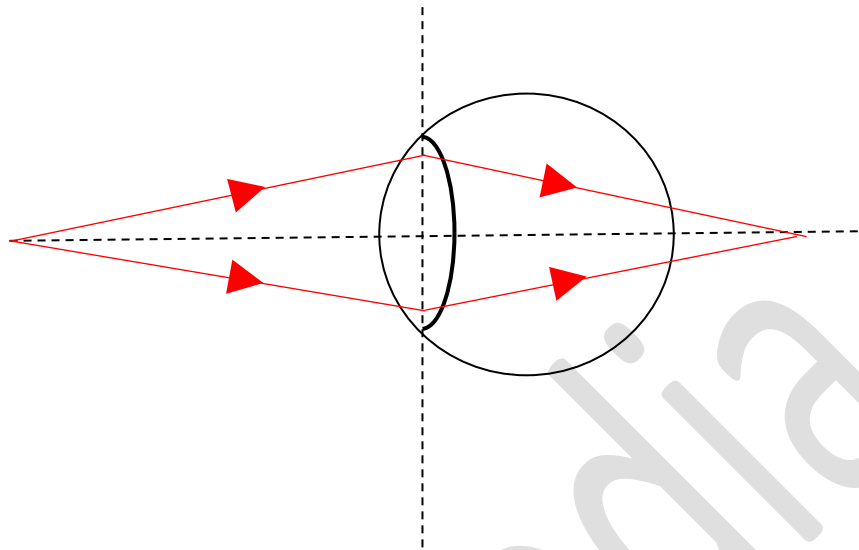
1. Near-sightedness



- Can see closer objects. Can't see an object in a distance clearly.
- In order to fix this, patient has to use **concave lenses**.



2. Far-sightedness



- Can't see closer objects. Can see an object in a distance clearly.
- In order to fix this, patient has to use **convex lenses**.

