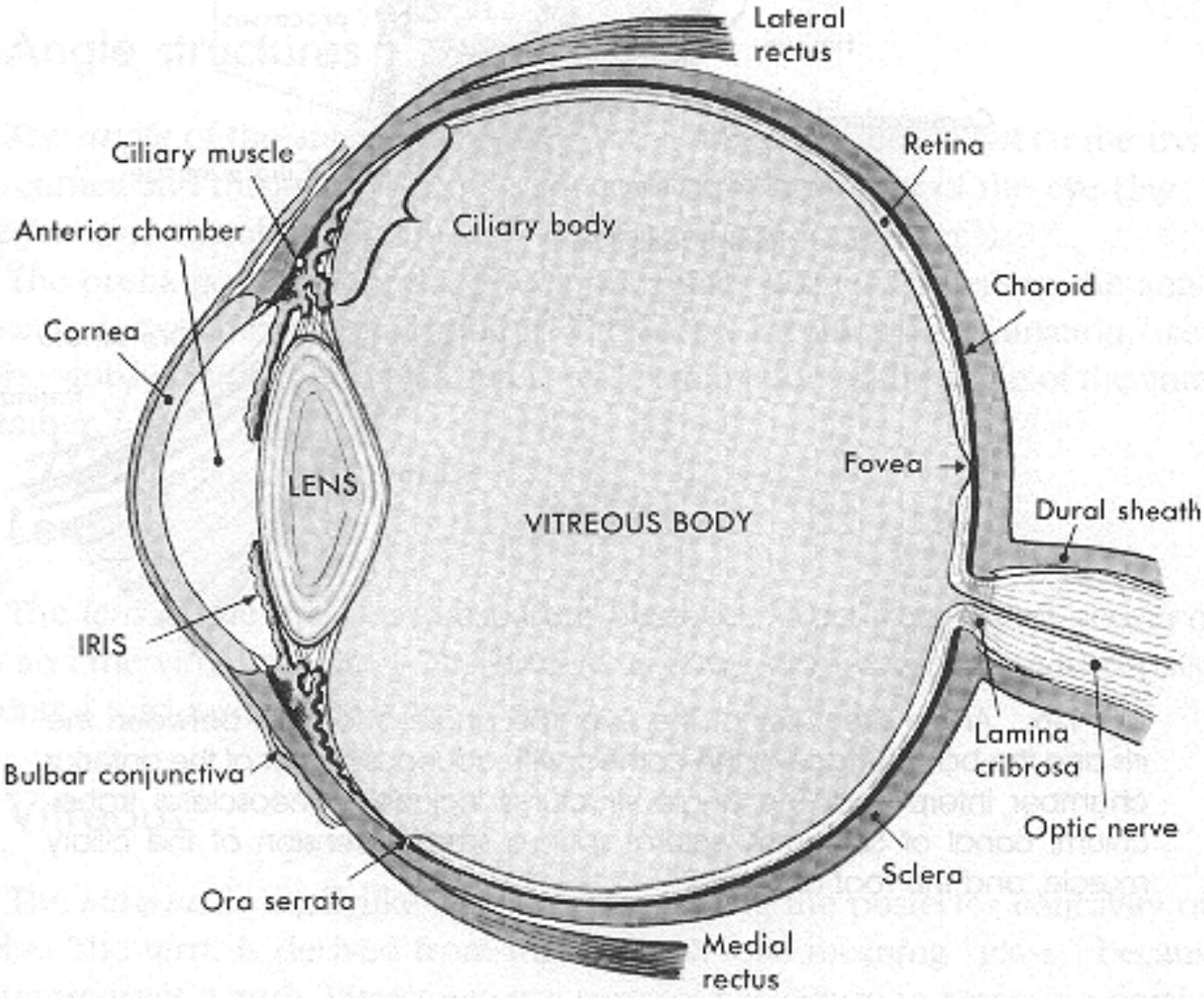
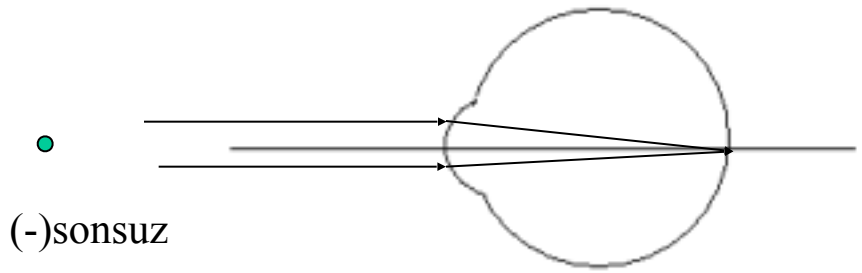
GÖZÜN REFRAKTİF DURUMU



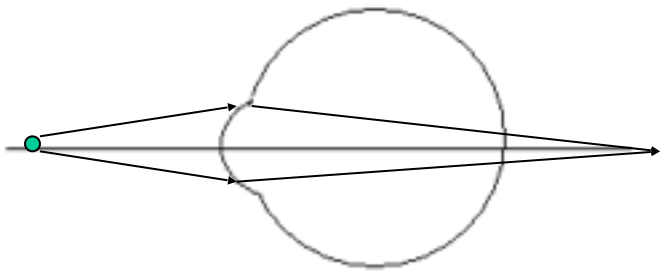
The eye cut in horizontal section.

GÖZÜN REFRAKTİF DURUMU

- Uzak nokta (puktum remotum)
  - Akomodasyon yapmayan bir gözde retina ile konjuge olan noktadır.
  - En uzak nokta (-) sonsuz
  - Myopide yakına gelir
  - Hipermetropide retinanın arkasındadır

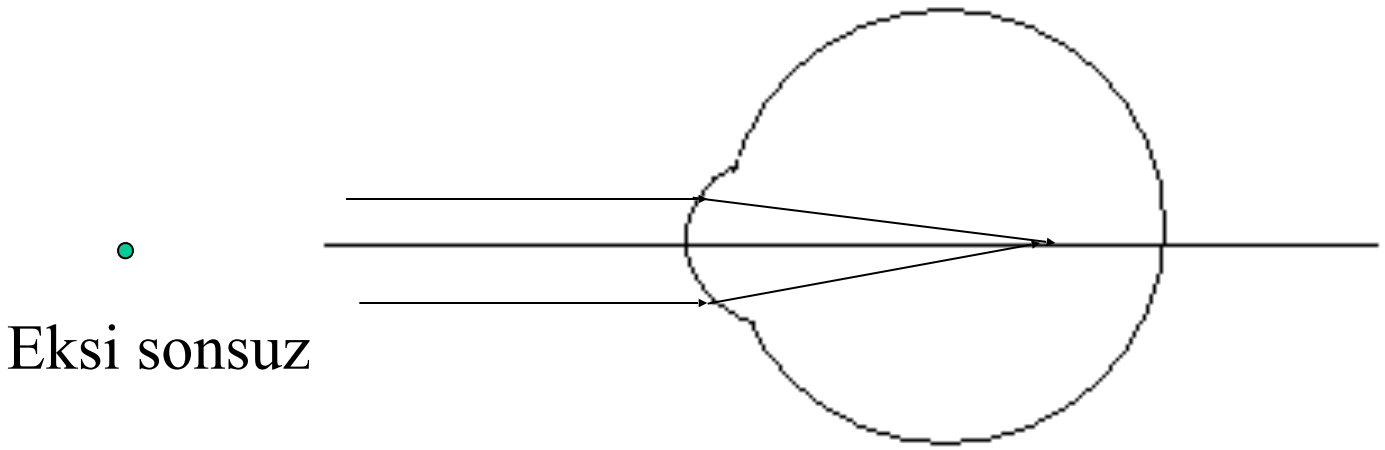


Eksi sonsuzdaki bir noktadan çıkan ışınlar göze paralel gelir

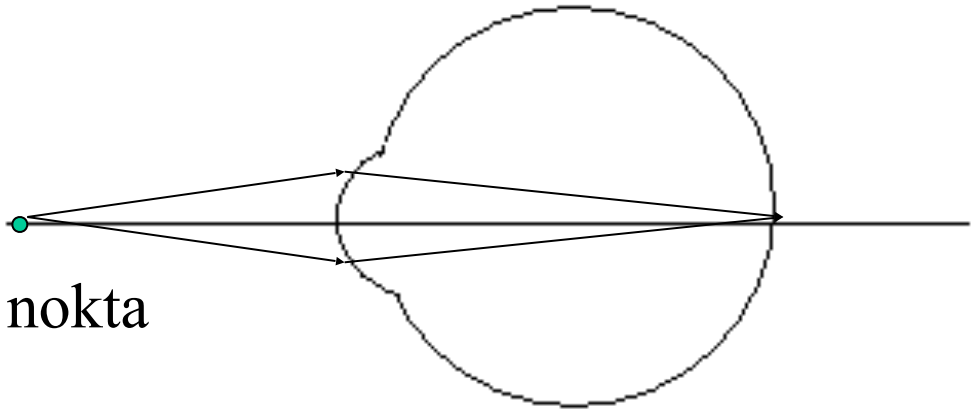


Eksi sonsuzdan daha yakın bir noktadan çıkan ışınlar göze açılarak (diverjan)gelir

Myopi

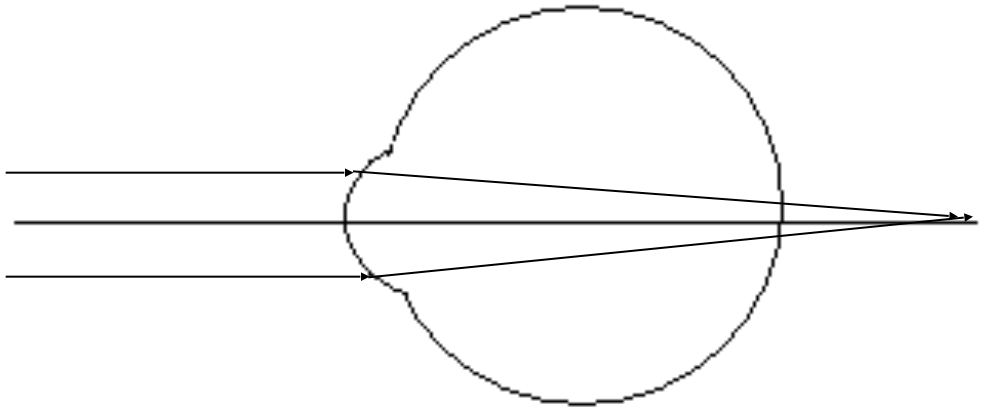


Myopi

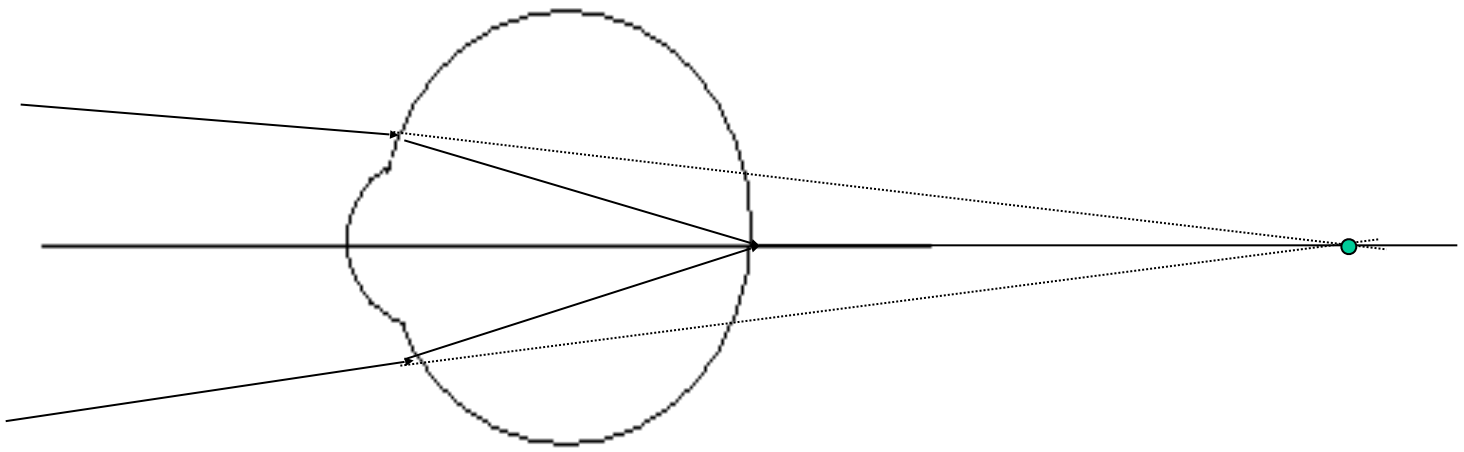


Uzak nokta

Hipermetropi

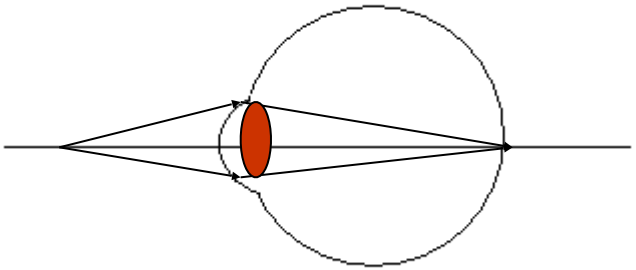


Hipermetropi



Hipermetropide bir noktadan göze gelen ışınların retinaya odaklanabilmeleri için o ışınların göze toplanarak (konverjan) gelmeleri gerekir

- YAKIN NOKTA (punktum proksimum)
  - Gözün tüm akomodasyon yeteneğini kullanarak görebildiği en yakın noktadır

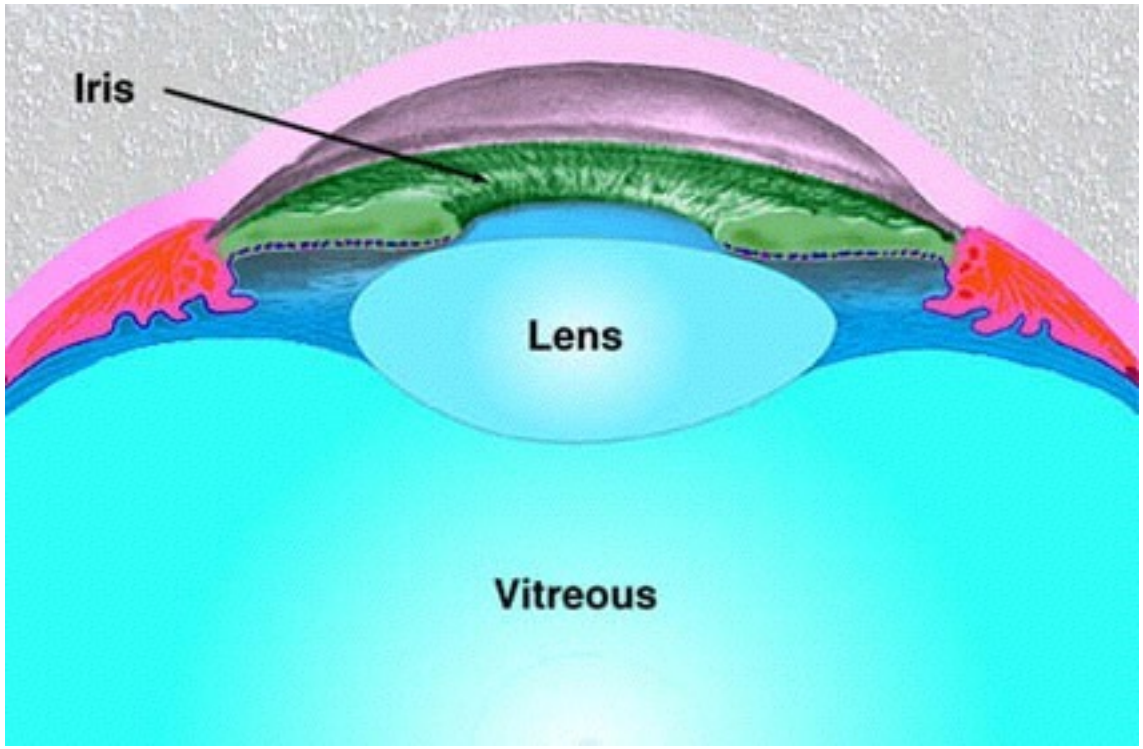


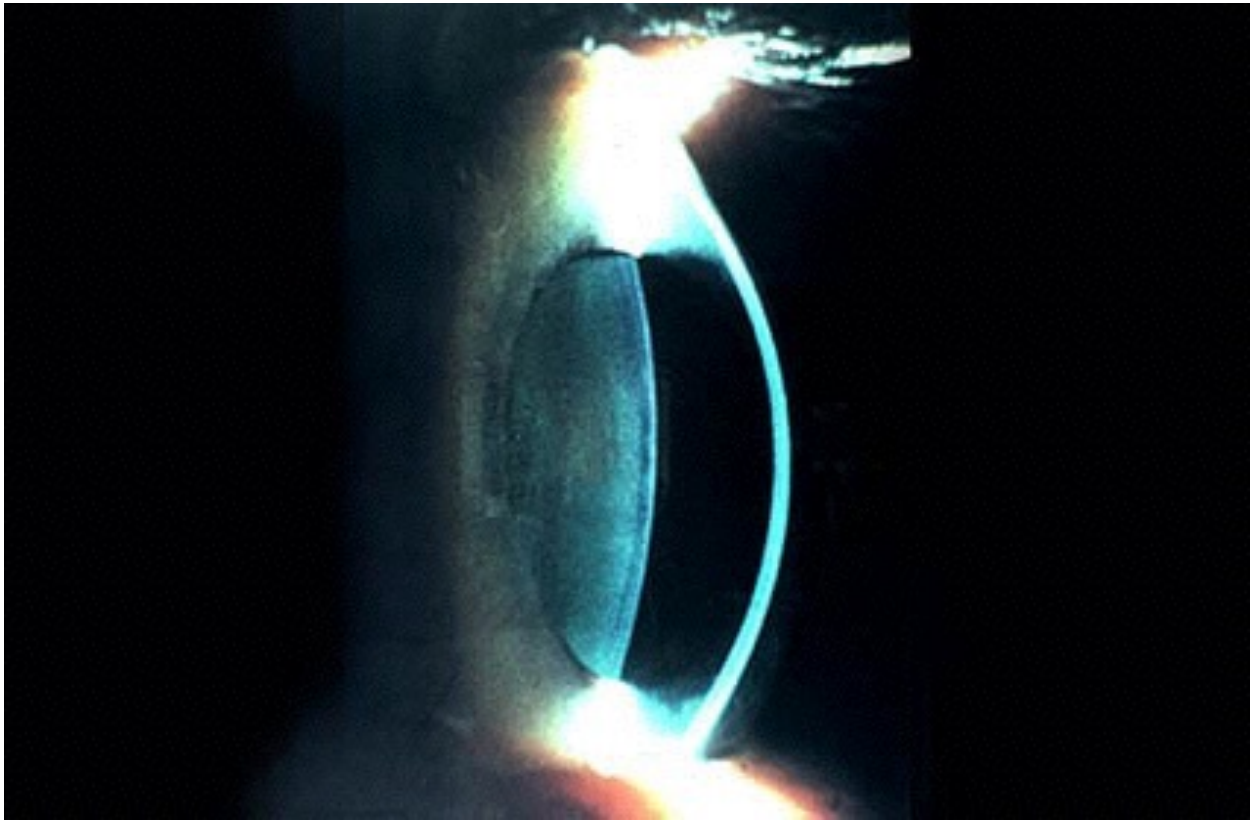
Akomodasyon

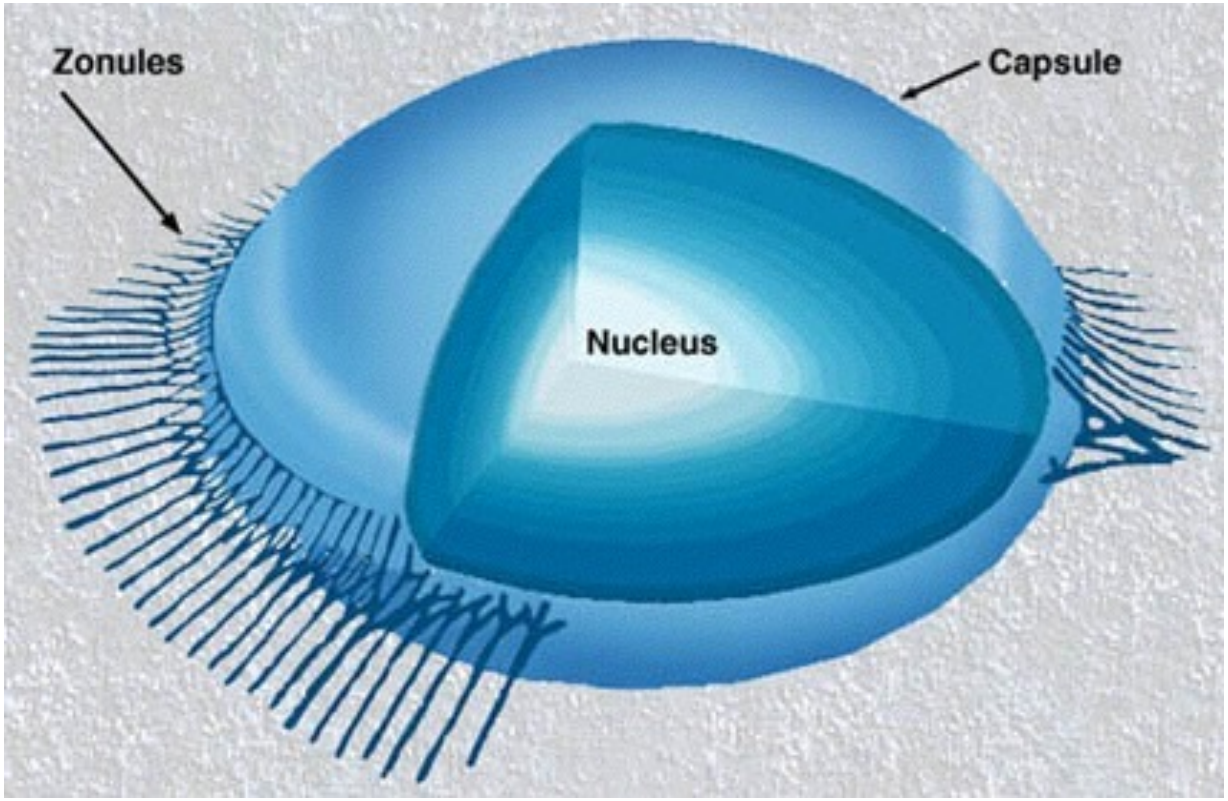
- Yakındaki cisim görüntülerinin retina üzerine odaklanabilmesi için gerekir
- 5 metreden yakındaki cisimler için gerekir

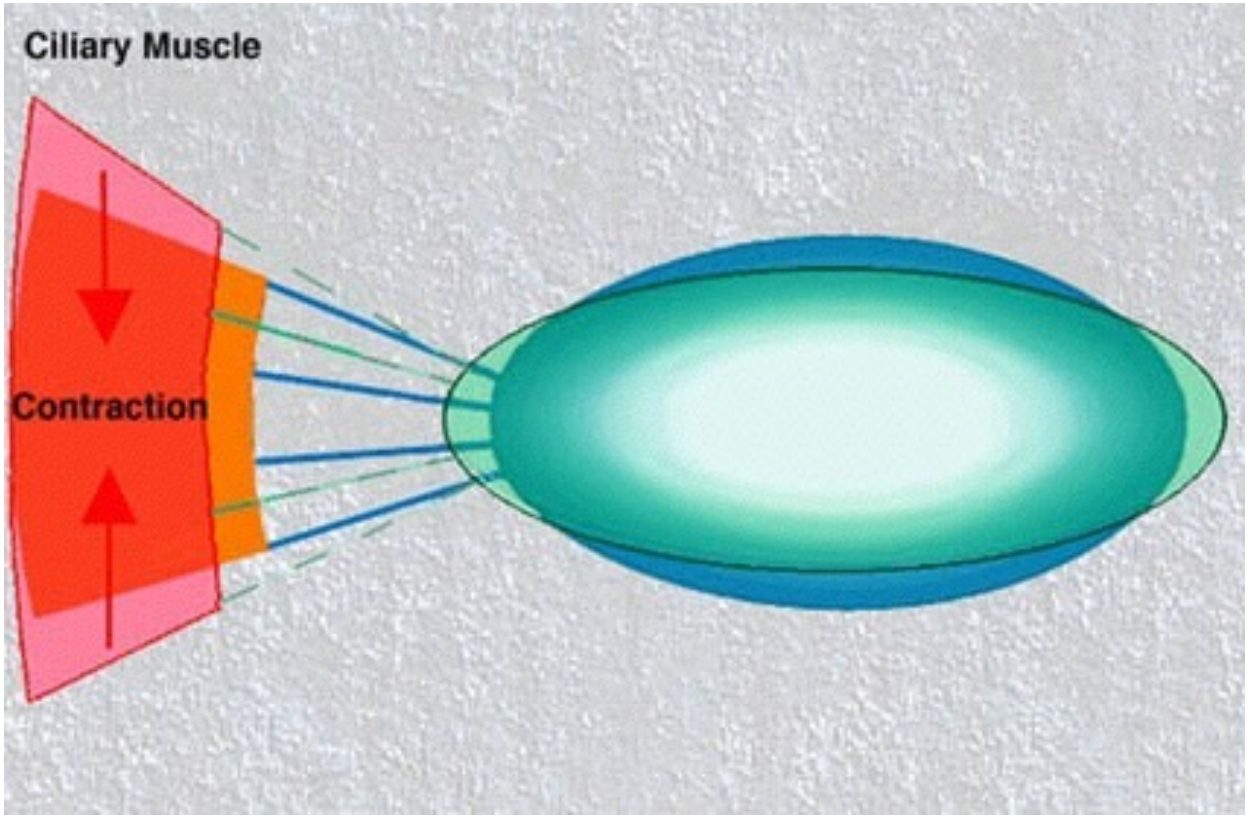
Akomodasyon

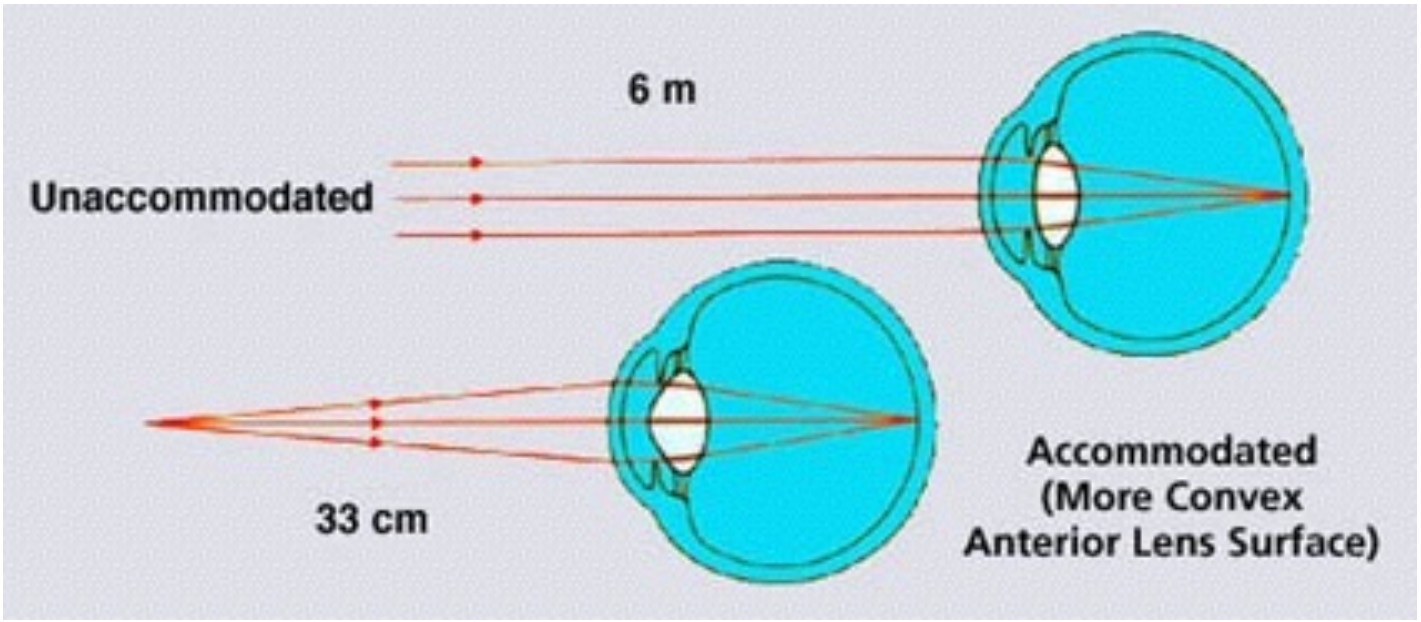
- Akomodasyon 3 olayın aynı anda olması ile oluşur
  - Lensin kalınlaşması
  - Konverjans
  - Myozis

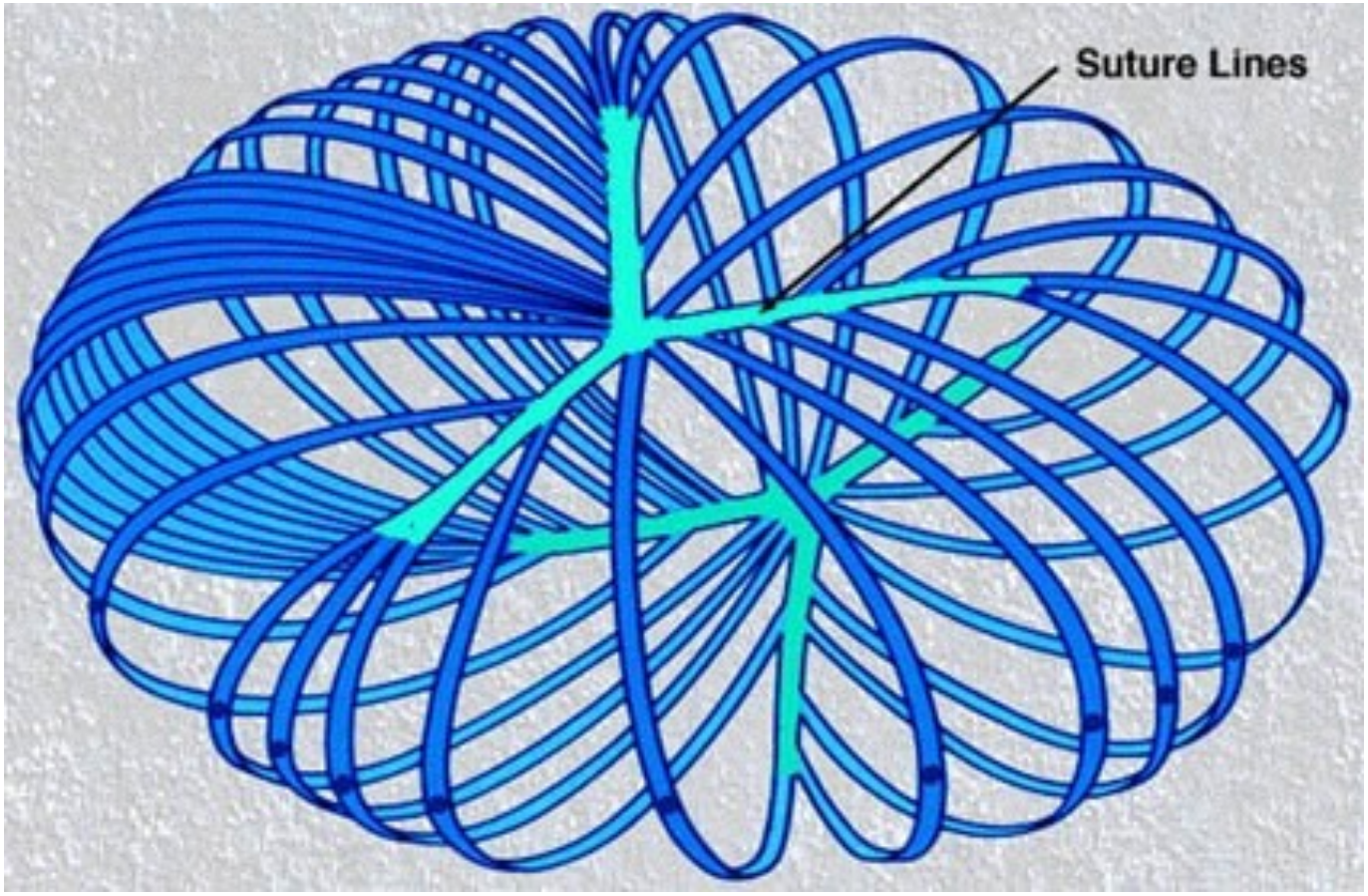

Iris
Lens
Vitreous




Zonules
Capsule
Nucleus


Ciliary Muscle
Contraction


6 m
Unaccommodated
33 cm
Accommodated
(More Convex
Anterior Lens Surface)


Suture Lines

This table illustrates how nearsighted we become with age.

Ex. A 10-year old is able to read fine print at a distance of 7cm from the eye, whereas a 60-year old cannot see fine print closer than 100cm from the eye.

Age	Near point of vision (cm)	Diopters
10	7	14
20	9	11
30	12	8
40	22	4,5
50	40	2,5
60	100	1
70	400	0,75
75	∞	0

Akomodasyon amplitüdü

- AA = PP (D) – PD (D)
- Dioptri cinsinden hesaplanır