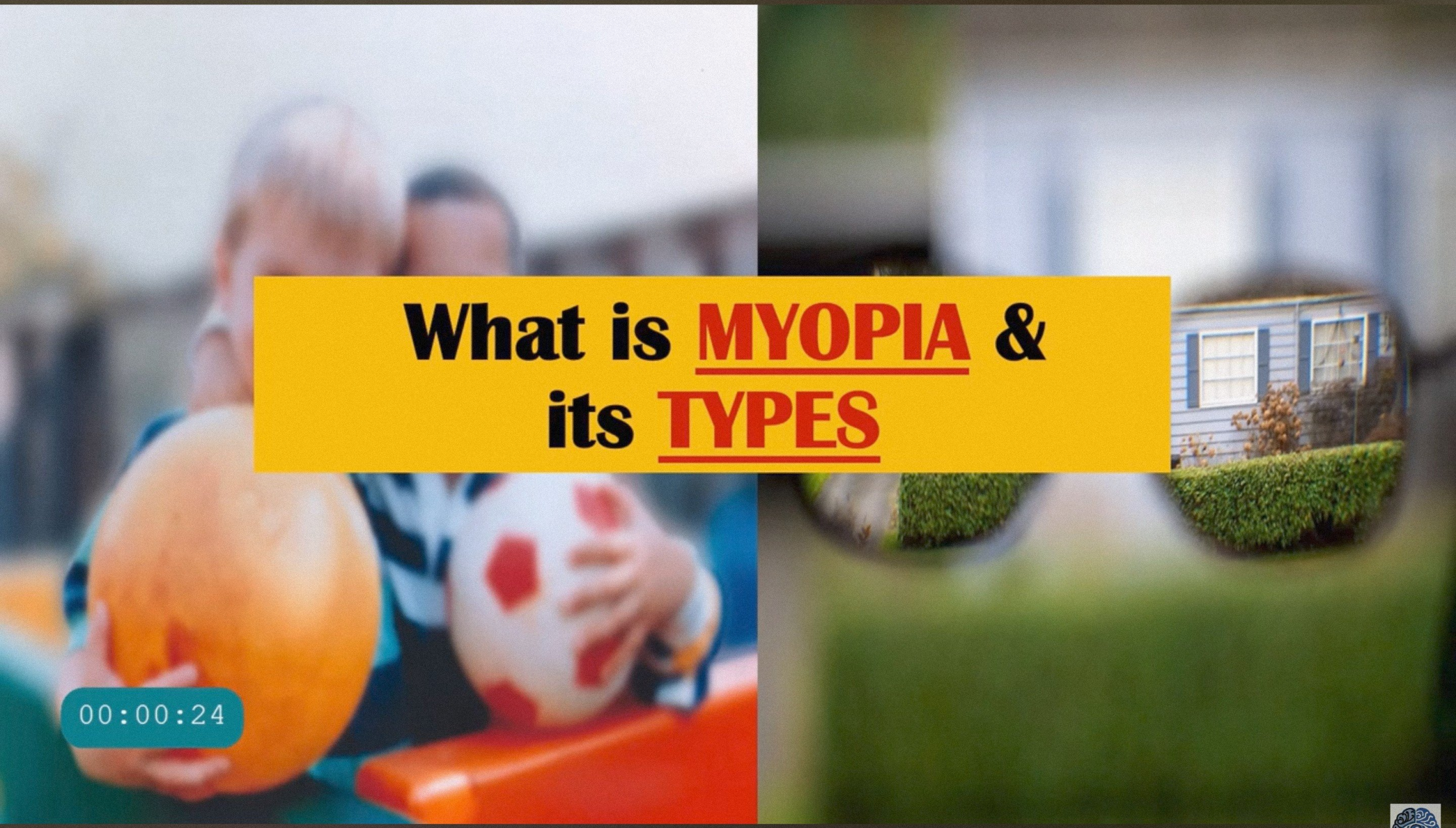
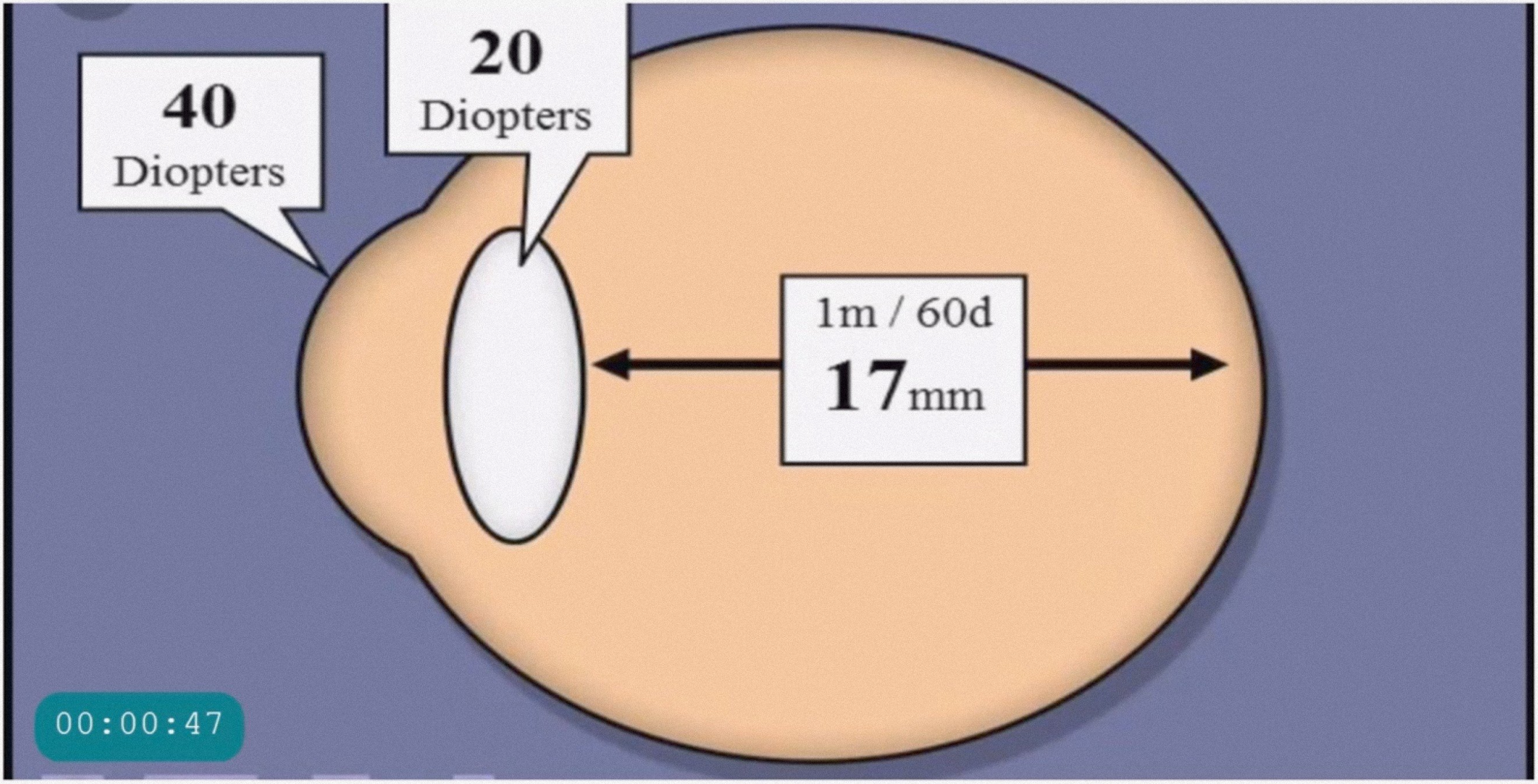
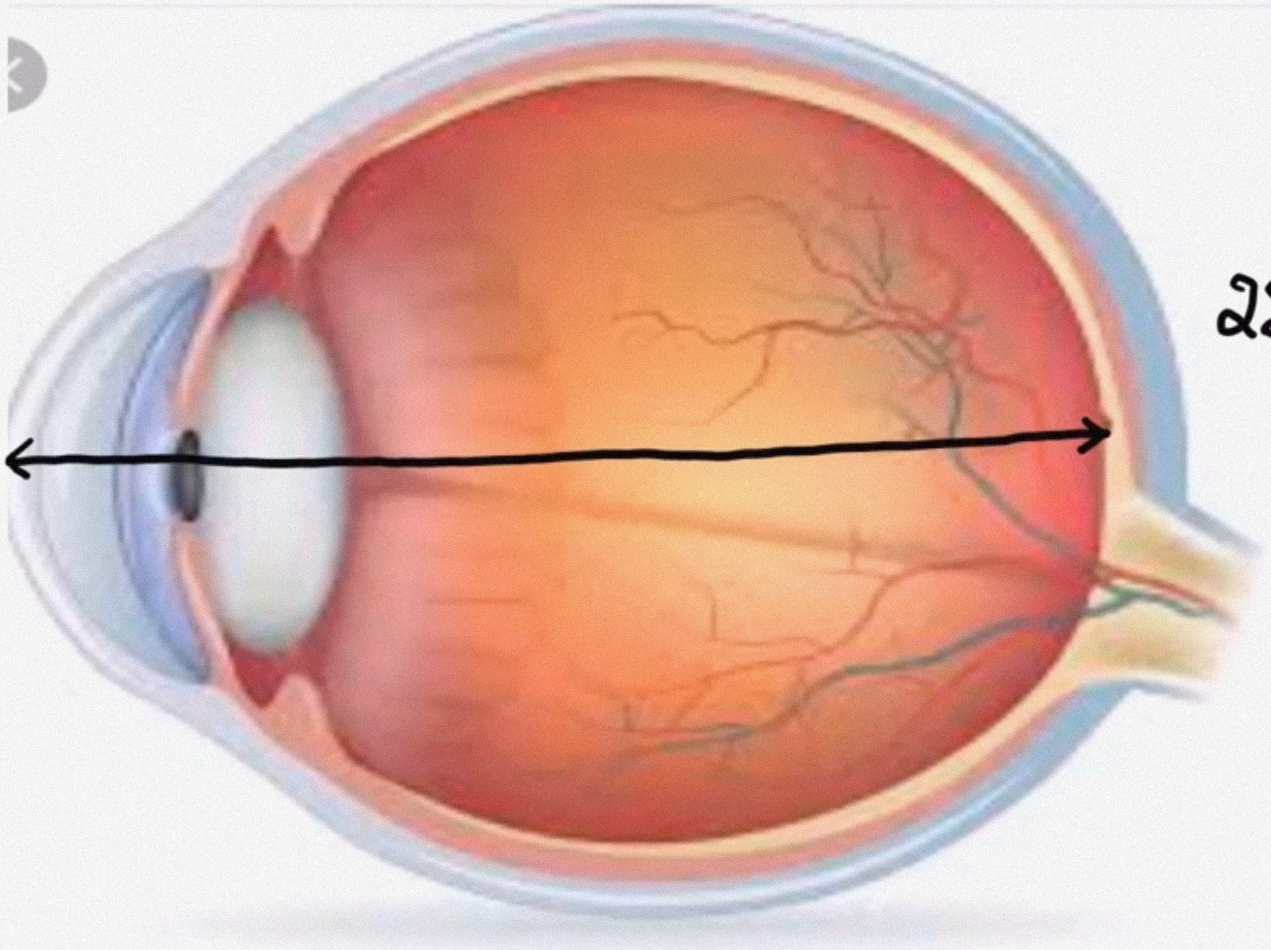

What is MYOPIA &
its TYPES
00:00:24


40
Diopters
20
Diopters
1m / 60d
17mm
00:00:47



22 - 24.5 mm

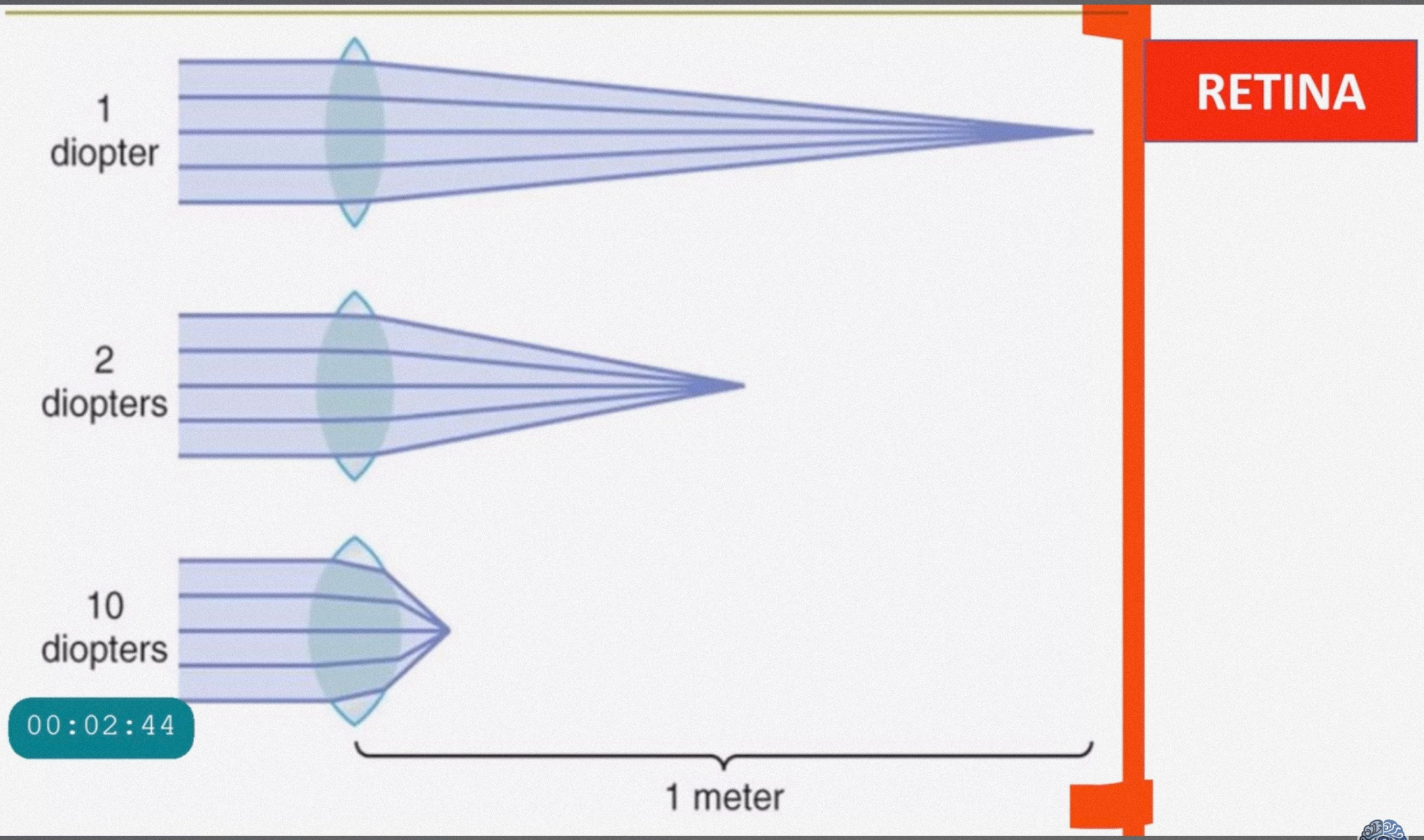
Avg = 23.05 mm

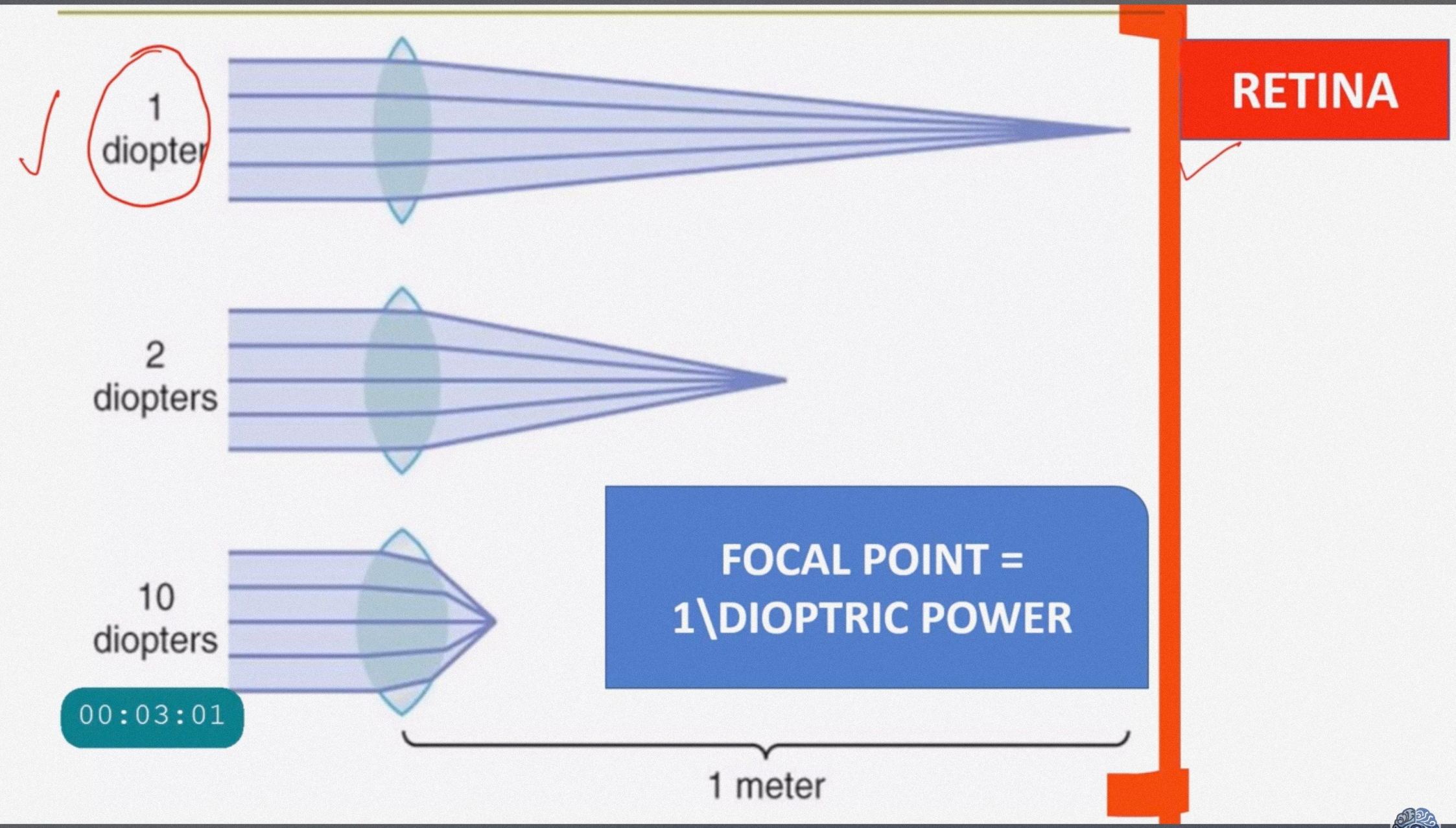
00:01:39

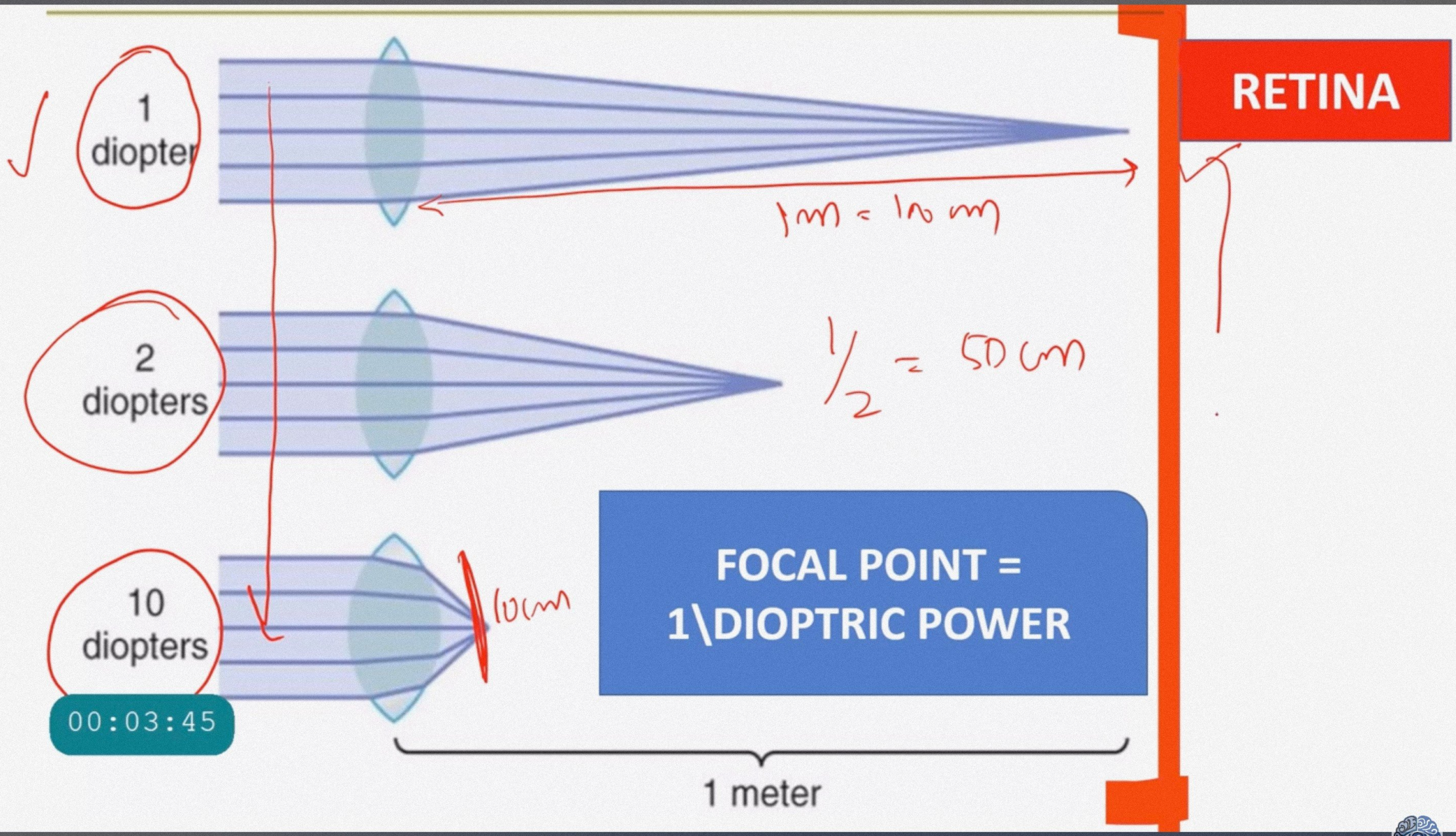
- Myopia results from an eye having excessive refractive power for its axial length.

- Relatively long axial length or
- Increased dioptric power of one or more of the refractive element

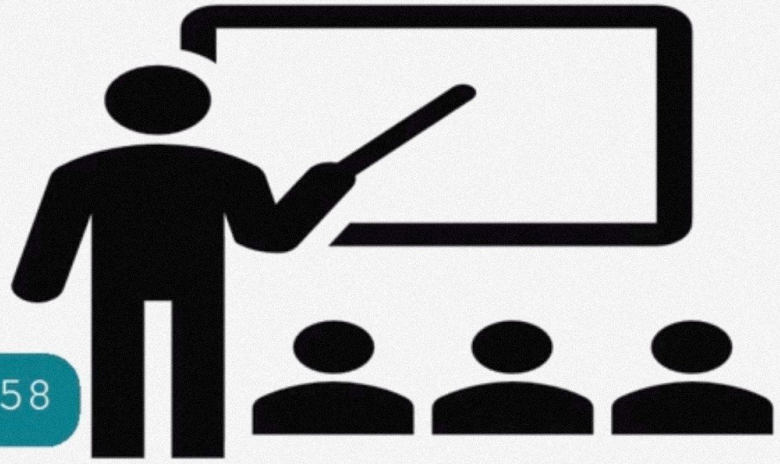
00:02:10


1
diopter
2
diopters
10
diopters
RETINA
1 meter
00:02:44


1
diopter
2
diopters
10
diopters
RETINA
FOCAL POINT =
1\DIOPTRIC POWER
1 meter


1 diopter
2 diopters
10 diopters
RETINA
1m = 100 cm
1/2 = 50 cm
10cm
FOCAL POINT = 1\DIOPTRIC POWER
1 meter
00:03:45

LET'S CLASSIFY MYOPIA!!



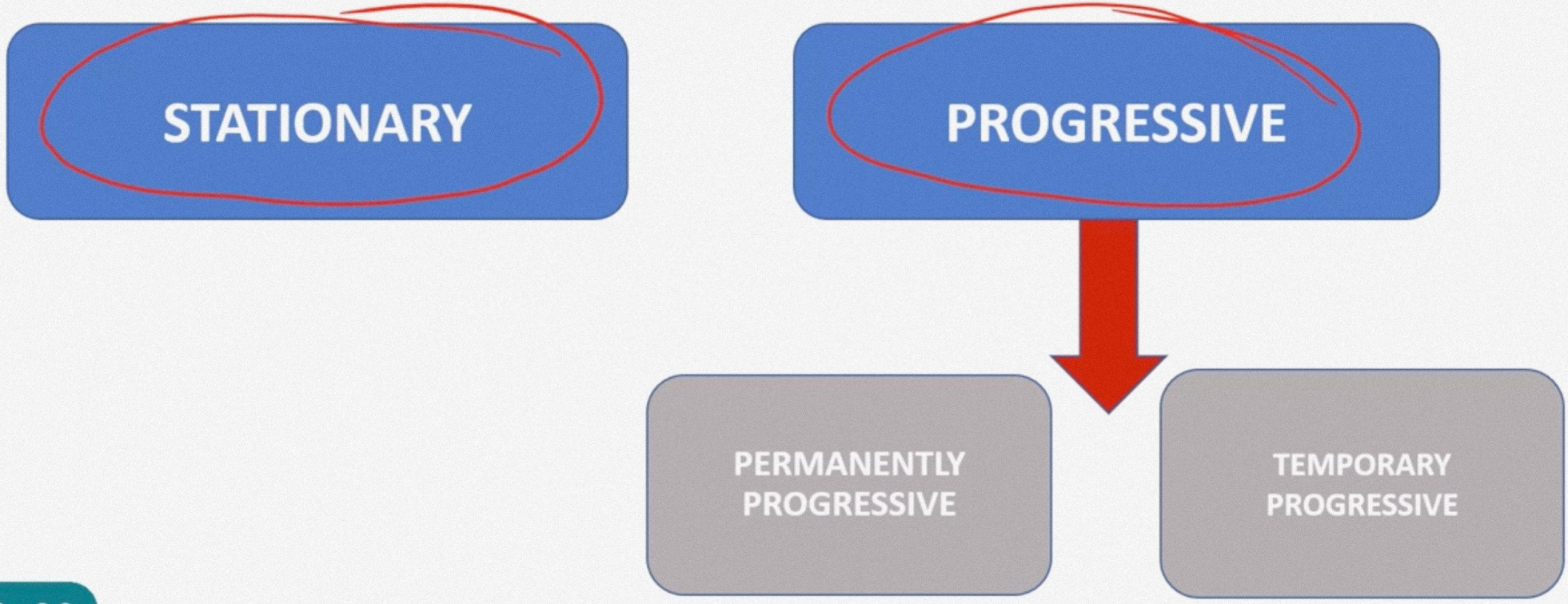
00:04:58

BASED ON

- Rate of myopic progression
- Anatomical classification of myopia
- Degree of myopia
- Physiological and pathological myopia
- Age of myopia onset

00:05:19

CLASSIFICATIPN BASED ON RATE OF PROGRESSION



00:05:33

STATIONARY MYOPIA

- Stationary myopia is generally of low degree (-1.50 to -2.00 D)
- Arises “in the years of development.”
- Remains stationary in adulthood

00:06:03

TEMPORARY V/S PERMANENT PROGRESSIVE

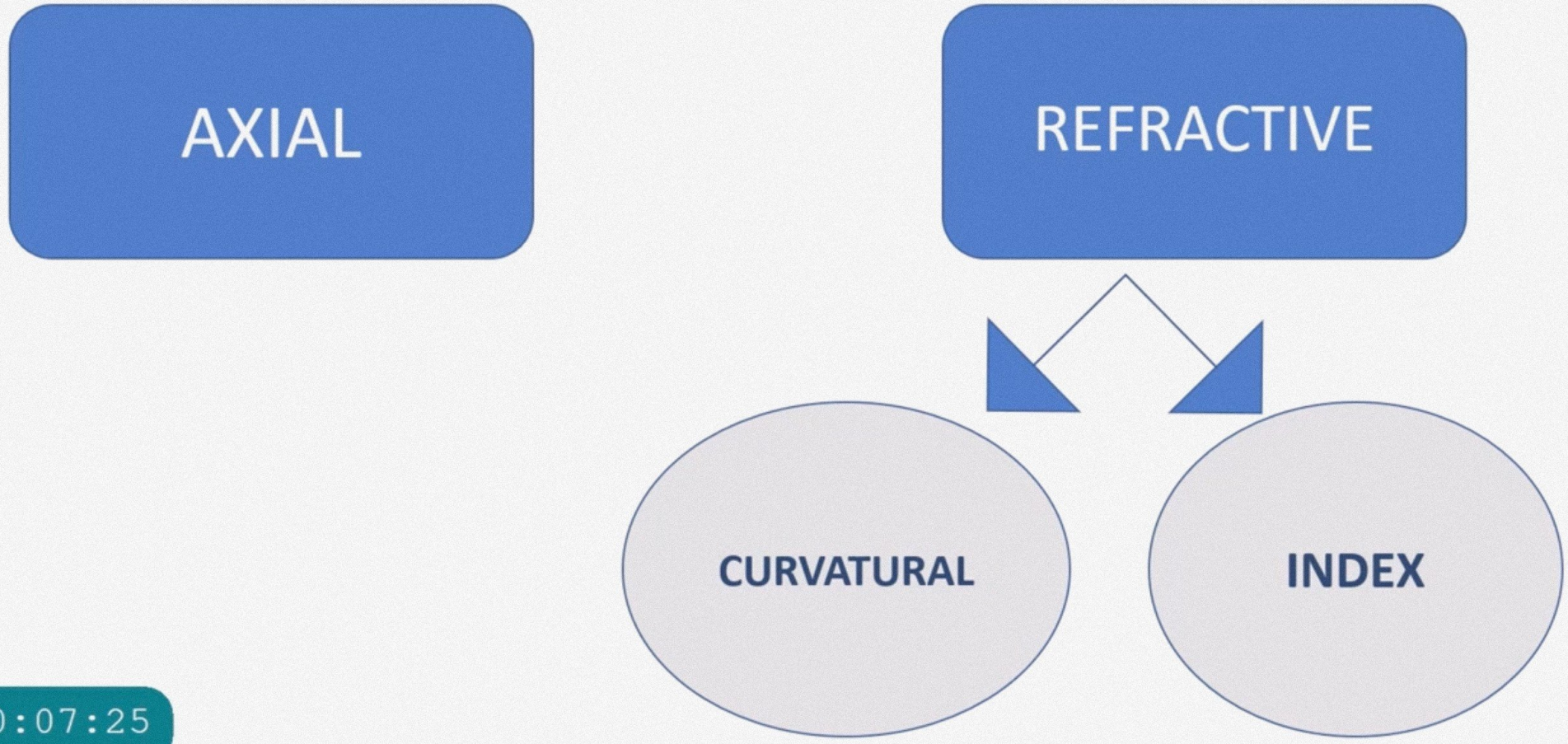
- Temporarily progressive myopia generally arises in the early teens and progresses until the LATE 20S
- After this age, the rate of myopia progression approaches zero.

- Permanently progressive myopia ascends rapidly until around 25 to 35 years of age, and thereafter ADVANCES MORE SLOWLY.

00:06:14

ANATOMICAL CLASSIFICATION OF MYOPIA

00:07:01



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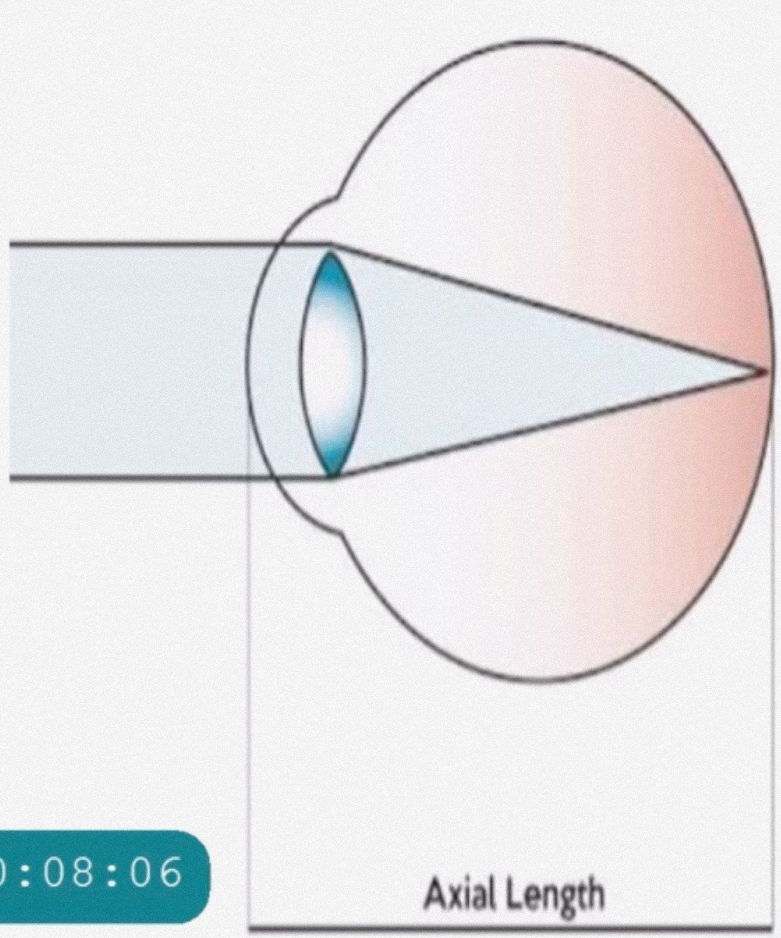
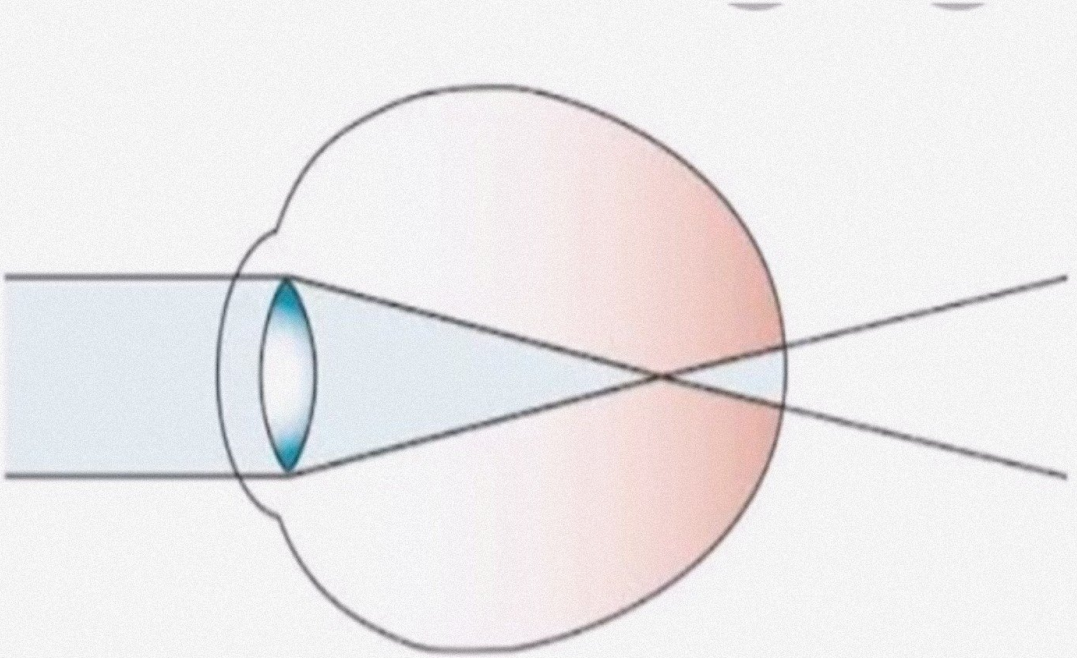
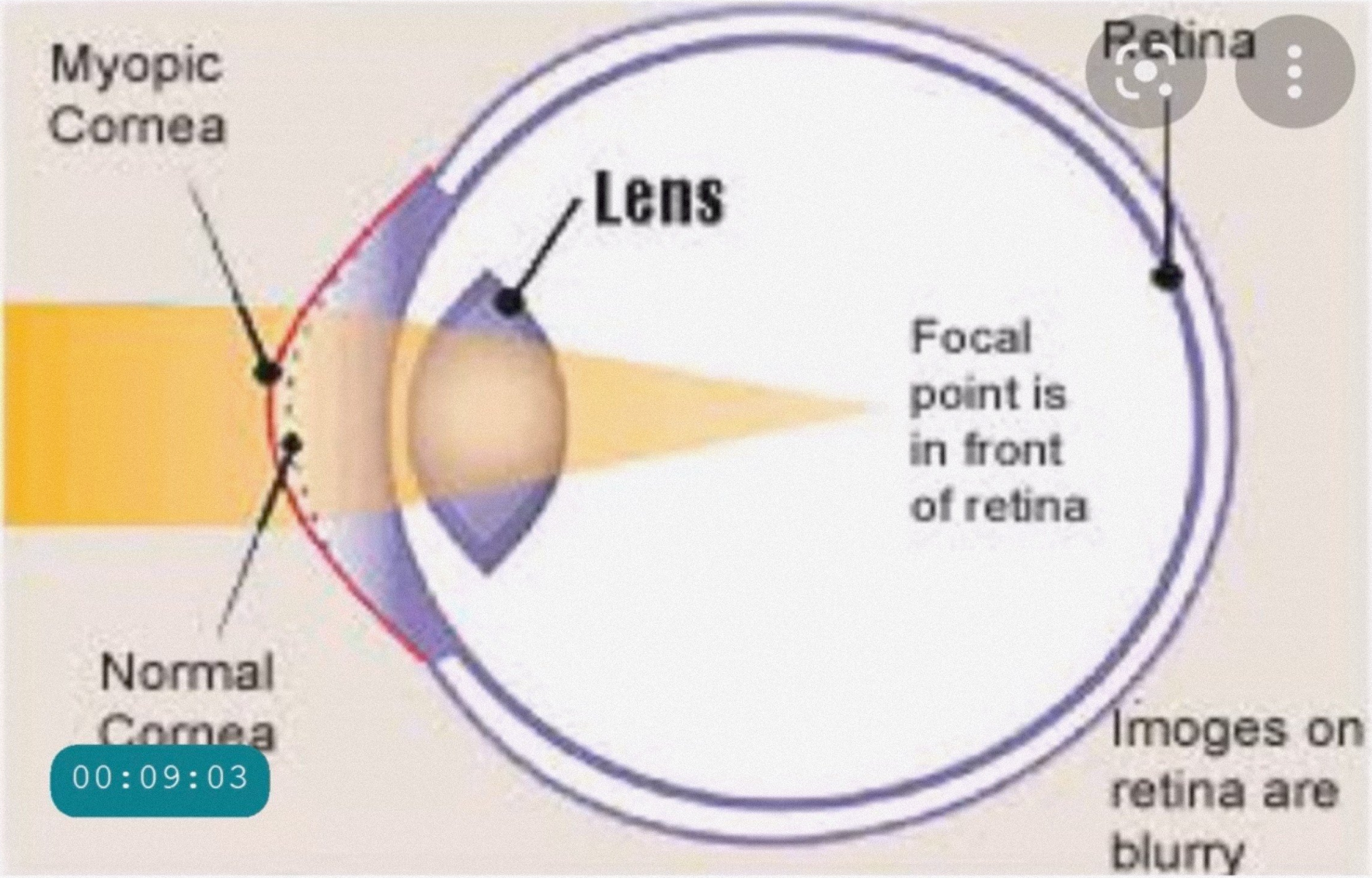
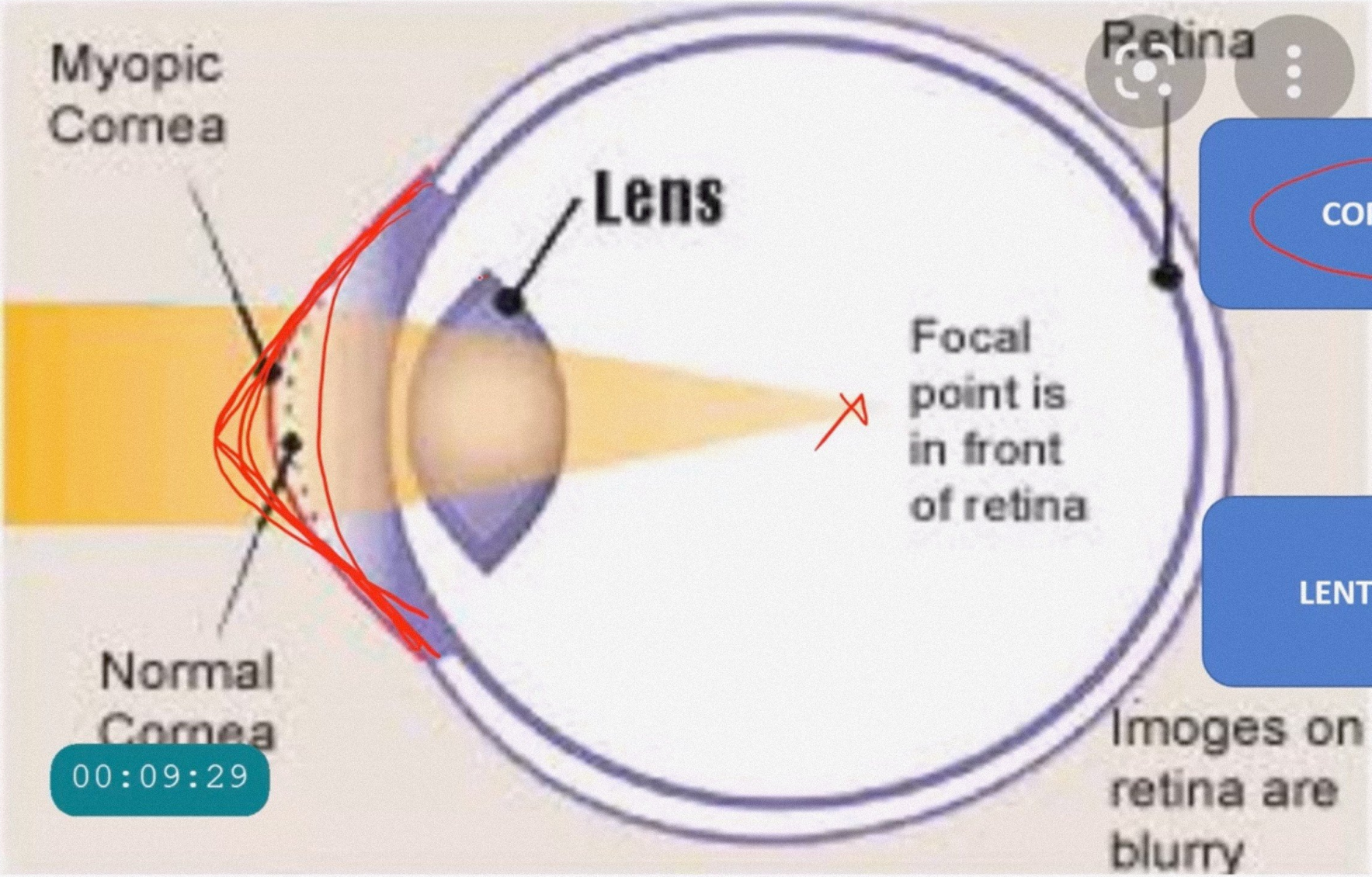




00:08:06


Myopic
Cornea
Retina
Lens
Focal
point is
in front
of retina
Normal
Cornea
Imoges on
retina are
blurry

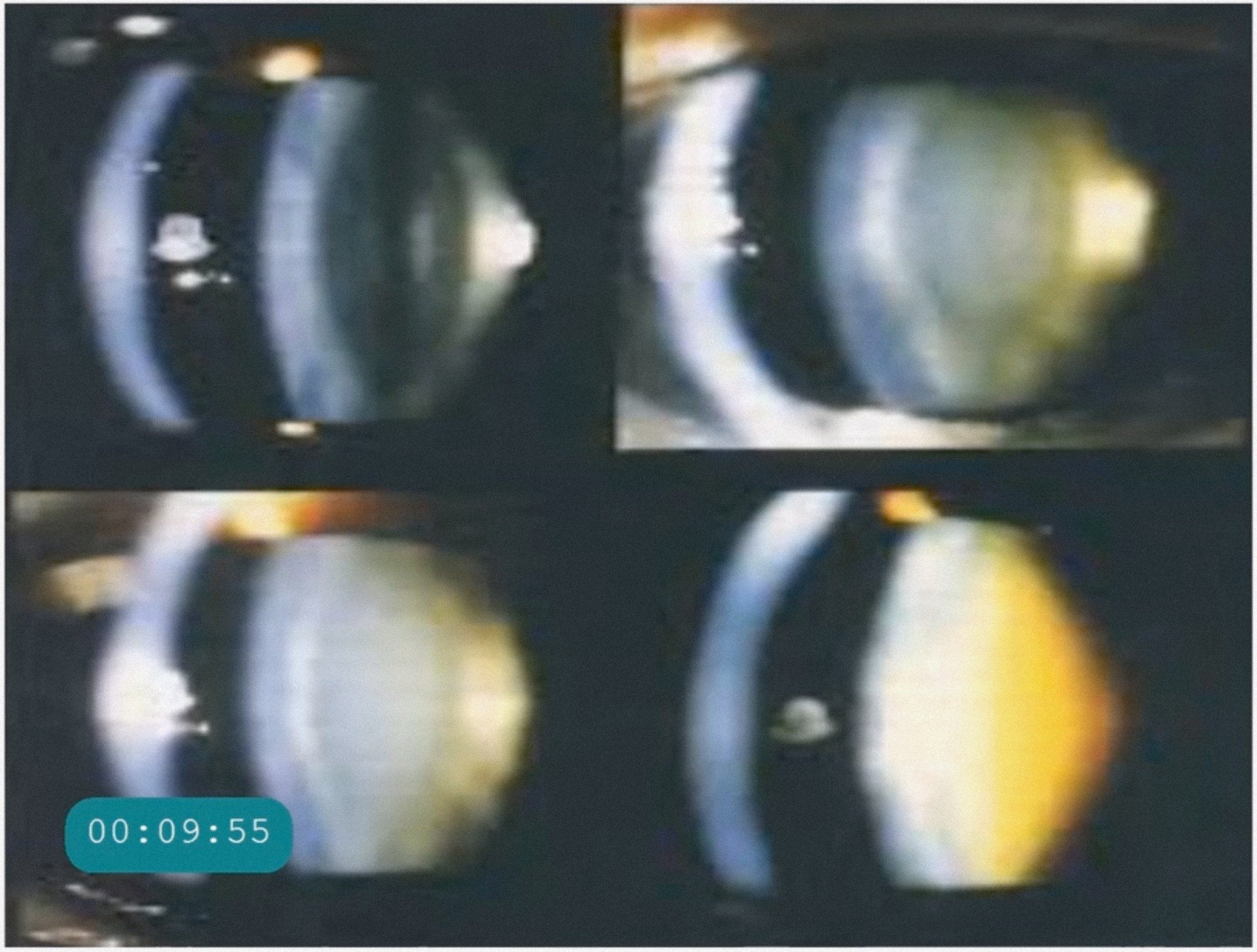
00:09:03

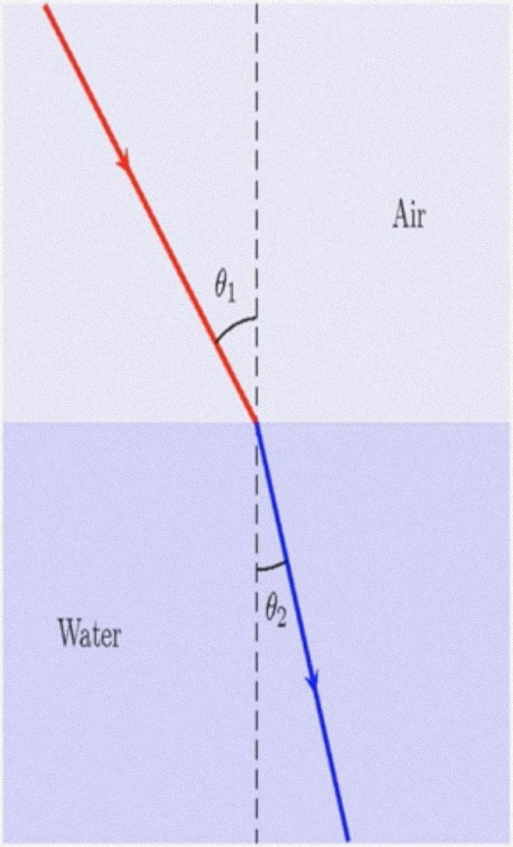


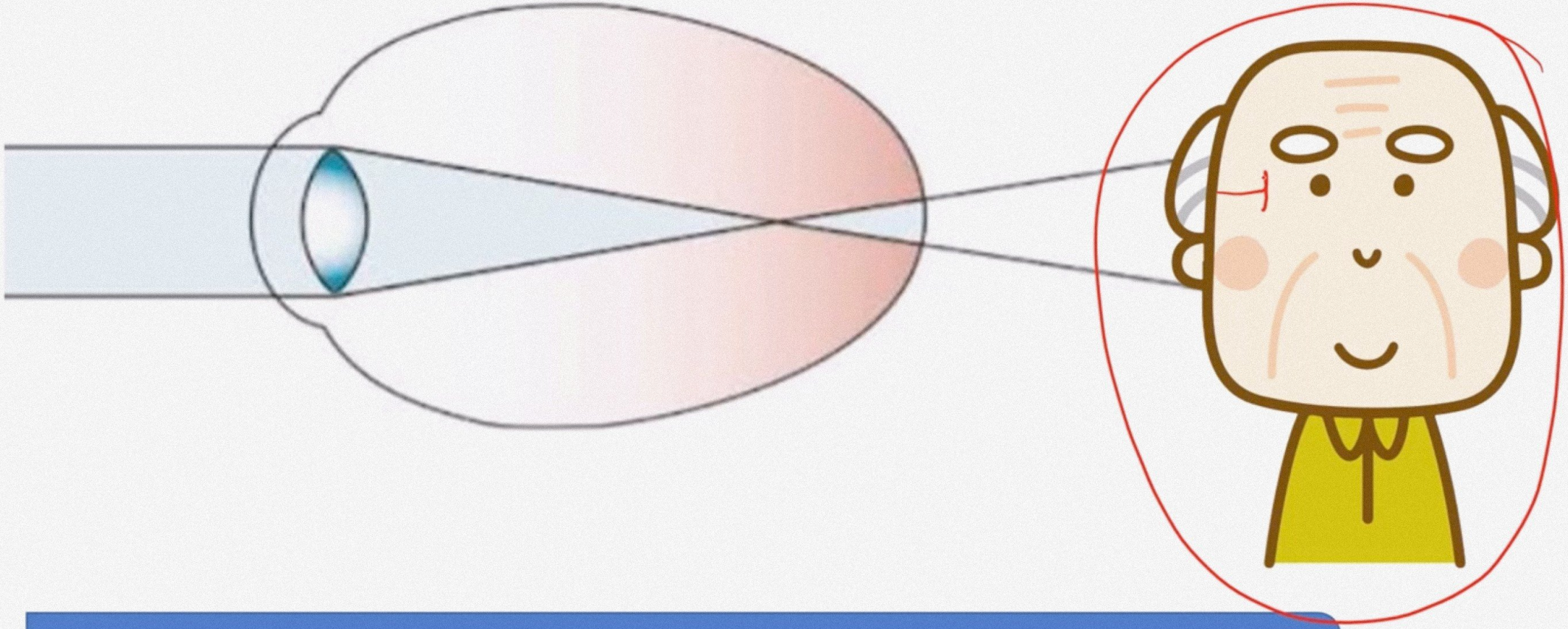
CORNEAL MYOPIA

LENTICULAR MYOPIA

00:09:29


00:09:55


Air
θ_1
θ_2
Water



PRESBYOPIC PATIENT + NUCLEAR SCLEROSIS = INDEX MYOPIA (SECOND SIGHT)

00:11:27

CLASSIFICATION BASED ON DEGREE OF MYOPIA

00:00:34

BASED ON DEGREE OF MYOPIA

LOW MYOPIA :- UPTO 3 D

- MODERATE MYOPIA :- 4 -5 D

HIGH MYOPIA :- 6 AND HIGHER

00:00:02

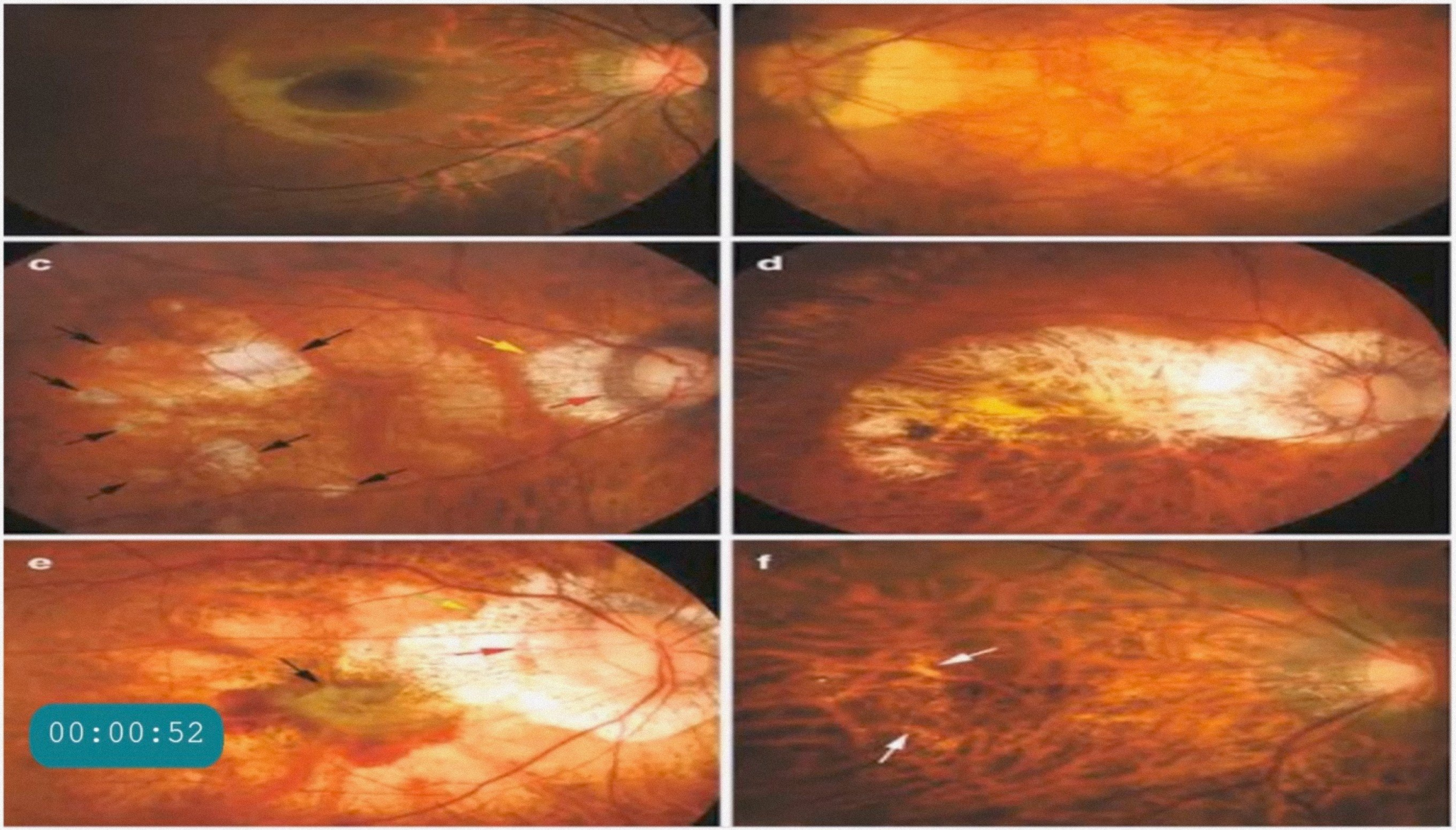
PHYSIOLOGICAL V/S PATHOLOGICAL MYOPIA

00:00:09

PHYSIOLOGICAL v/s PHYSIOLOGICAL

- Myopia without any ocular pathology
- Pathological myopia may also be described as malignant or degenerative myopia.
- This is most frequently found in high (>6 D) degrees of myopia

00:00:16


c
d
e
f
00:00:52

CLASSIFICATION BASED ON AGE OF ONSET

00:01:07

- **CONGENITAL MYOPIA**-Myopia is present at birth and persists through infancy.
- **YOUTH-ONSET MYOPIA**-The onset of myopia occurs between 6 years of age and the early teens.
- **EARLY ADULT-ONSET MYOPIA**-The onset of myopia occurs between 20 and 40 years of age.
- **LATE ADULT-ONSET MYOPIA**-Myopia onset occurs after 40 years of age.

00:01:12

SPECIAL TYPES OF MYOPIA

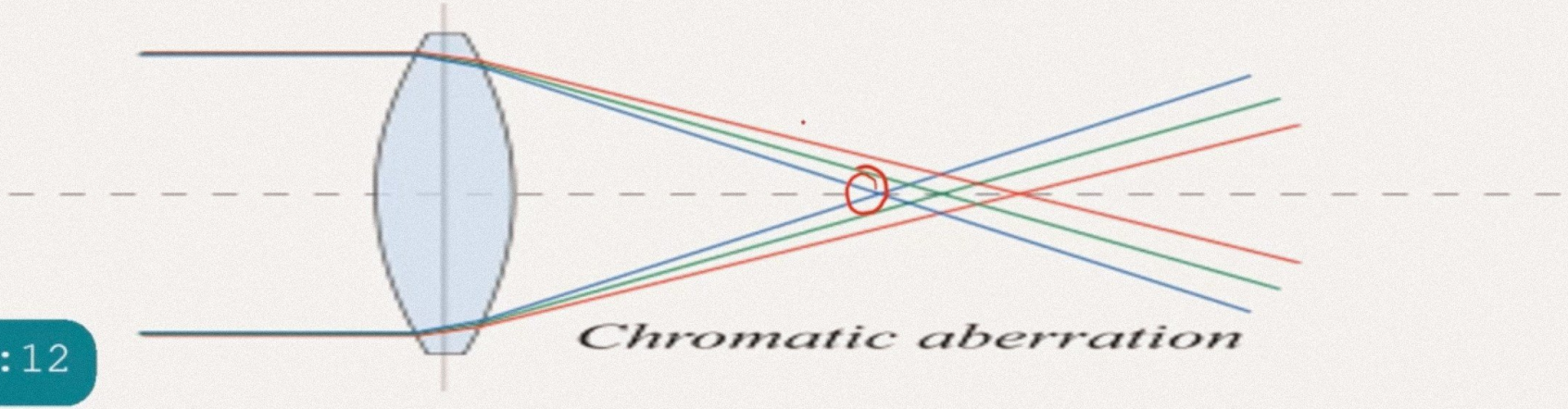
00:00:00

NIGHT MYOPIA

- The phenomenon of increased myopia under low luminance conditions.
- Night myopia is produced by an **INCREASED ACCOMMODATIVE RESPONSE** (typically on the order of 0.50 to 1.00 D) under degraded stimulus conditions.

00:00:06

- Changes in chromatic aberration.
- Its peak sensitivity shifts from approximately 555 nm to around 510 nm. This change in sensitivity is termed the PURKINJE SHIFT.
- Eye becomes more sensitive to BLUE
- Therefore appears to be more myopic than it is under photopic viewing conditions



00:01:12

PSEUDOMYOPIA

- Pseudomyopia has been defined as a reversible form of myopia that results from a **SPASM OF THE CILIARY MUSCLE**.
- The excessive accommodative response produces an apparent myopic shift that will disappear when a cycloplegic agent is administered to produce relaxation of accommodation.

00:02:02