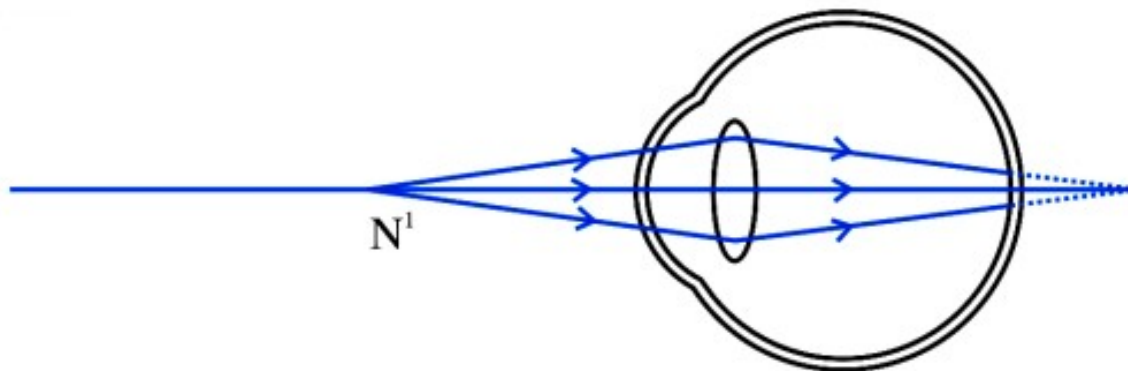


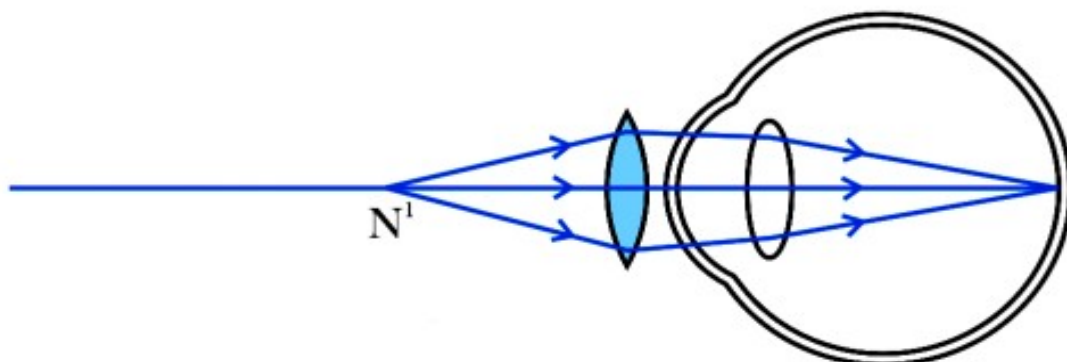
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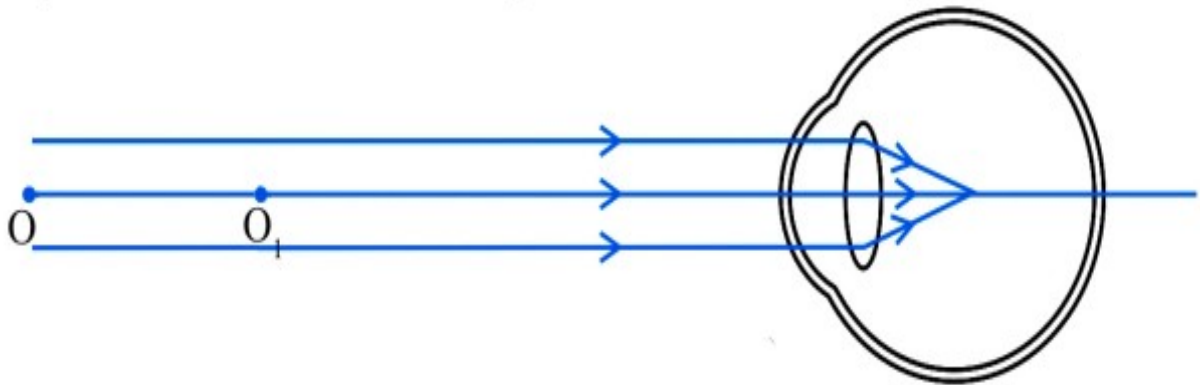
Hypermetropia or Long-sightedness



- \* For some persons, even though distant objects can be seen clearly, they may not be able to see nearby objects clearly. This defect is the long sightedness.
- \* The near point of the eye of such a person will be at a distance of more than 25 cm.
- \* The image of nearby objects formed behind the retina.
- \* What shall be the reasons behind this defect?
  - The size of the eye ball is smaller.
  - Power of the lens is low (focal length is high).
- \* What is the remedy for long – sightedness?  
This can be rectified by using a convex lens of suitable power.



## Myopia or Near-sightedness



\* For some persons, even though nearby objects can be seen clearly, they may not be able to see distant objects clearly. This defect is the near sightedness.

\* The near point of such persons will not be at infinity. It will be at a definite distance from the eye.

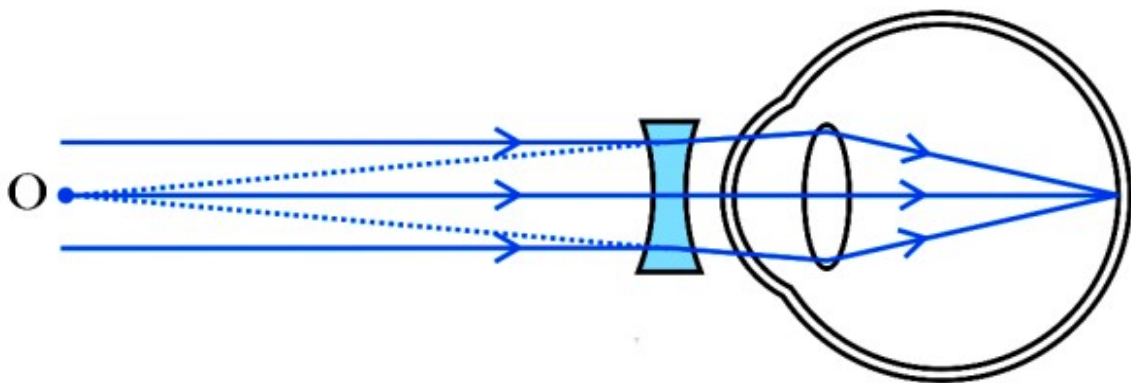
\* The image of distant objects formed in front of retina.

\* What shall be the reasons behind this defect?

- The size of the eye ball is larger.
- power of the lens is high (focal length is low).

\* What is the remedy for long – sightedness?

This can be overcome by using concave lens of suitable power.



## Presbyopia

For elderly people the distance to the near point is greater than 25 cm. This is due to the diminishing ability of the ciliary muscles. For such people the power of accommodation will be less. This is presbyopia.

This can be overcome using convex lens of suitable power.

## Eye Donation

- \* Any people of any age can donate eyes.
- \* Exception is the cornea of those people having certain diseases.
- \* The cornea of the donor should be harvested within 6 hours of death.

## Worksheet

1. some people can see distant objects clearly but cannot see nearer objects clearly.

- a) Name this defect of the eye
- b) Write down two reason for it.
- c) State the remedy