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Question
Write short notes on two eye defects
Answers:

1. **MYOPIA or NEARSHIGHTED**

Myopia occurs when the eyeball is too long, relative to the focusing power of the cornea and lens of the eye. This causes light rays to focus at a point in front of the retina, rather than directly on its surface If you're nearsighted, the first number ("sphere") on your eyeglasses prescription will be preceded by a minus sign (–). The higher the number, the more nearsighted you are.

Myopia symptoms

If you are nearsighted, you will have difficulty reading road signs and seeing distant objects clearly, but will be able to see well for close-up tasks such as reading and computer use.
Other signs and symptoms of myopia include squinting, eye strain and headaches. Feeling fatigued when driving or playing sports also can be a symptom of uncorrected nearsightedness.

What causes myopia?

Myopia occurs when the eyeball is too long, relative to the focusing power of the cornea and lens of the eye. This causes light rays to focus at a point in front of the retina,rather than directly on its surface.
Nearsightedness can also be caused by the cornea and/or lens being too curved for the length of the eyeball. In some cases, myopia occurs due to a combination of these factors. Myopia typically begins in childhood, and you may have a higher risk if your parents are nearsighted. In most cases, nearsightedness stabilizes in early adulthood but sometimes it continues to progress with age.

Myopia treatment

Nearsightedness can be corrected with eye glasses, contact lenses or refractive surgery.
Depending on the degree of your myopia, you may need to wear your glasses or contact lenses all the time or only when you need very clear distance vision, like when driving, seeing a chalkboard or watching a movie.
Good choices for eyeglass lenses for nearsightedness include high- index lenses(for thinner, lighter glasses) and lenses with anti-reflective coatings. Also, consider photochromic to protect your eyes from UV rays and high- energy blue light and to reduce the need for a separate pair of prescription sunglasses outdoors.
If you're nearsighted, the first number ("sphere") on your eye glasses prescription or contact lenses prescription will be preceded by a minus sign (–). The higher the number, the more nearsighted you are. Refractive surgery can reduce or even

eliminate your need for glasses or contacts. The most common procedures are performed with an excimer laser.
In PRK the laser removes a layer of corneal tissue, which flattens the cornea and allows light rays to focus more accurately on the retina.
In LASIK — the most common refractive procedure — a thin flap is created on the surface of the cornea, a laser removes some corneal tissue, and then the flap is returned to its original position.

2. **HYPEROPIAor FARESIGHTED**
This vision problem occurs when light rays entering the eye focus behind the retina, rather than directly on it. The eyeball of a farsighted person is shorter than normal. Farsightedness can be corrected with glasses to change the way light rays bend into the eyes. If your glasses begins with plus numbers, like +1.50, you are farsighted

Hyperopia Causes
Your eyes focus on light rays and send the image of what you're looking at to your brain. When you're farsighted, the light rays don't focus the way they should.
The cornea, the clear outer layer of your eye, and the lens focus images directly on the surface of your retina, which lines the back of your eye. If your eye is too short, or the power to focus is too weak, the image will go to the wrong place, behind your retina. That's what makes things look blurry.

Hyperopia Symptoms
You may have:
Trouble focusing on nearby objects
Headaches
Blurry vision
Eye strain
Fatigue or headache after you do a close-up task such as reading

Hyperopia Treatment
For clear vision, you might need:
Glasses
Contact lenses
Vision correction surgery such as LASIK
With farsightedness, your prescription is a positive number, such as +3.00. The higher the number, the stronger the lenses.
Talk to your eye doctor about your options, how well they work, and what's involved.