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**DEPARTMENT:NURSING**

**COURSE:PHS212**

**ASSIGNMENT**Write short notes on any two eye defects;

 1. Astigmatism

[Astigmatism](https://www.webmd.com/eye-health/astigmatism-eyes%20) is a condition in which your [eye](https://www.webmd.com/eye-health/picture-of-the-eyes%20) isn’t completely round. Almost all of us have it to some degree.

Ideally, an eyeball is shaped like a perfectly round ball. Light comes into it and bends evenly, which gives you a clear view. But if your [eye](https://www.webmd.com/eye-health/ss/slideshow-eye-conditions-overview%20) is shaped more like a football, light gets bent more in one direction than another. That means only part of an object is in focus. Things at a distance may look blurry and wavy.

It’s common to have astigmatism along with [nearsightedness](https://www.webmd.com/eye-health/nearsightedness-myopia%20) (myopia) or [farsightedness](https://www.webmd.com/eye-health/farsightedness%20)(hyperopia). These three conditions are called refractive errors because they involve how your eyes bend (refract) light.

Astigmatism Symptoms

[Symptoms of astigmatism](https://www.webmd.com/eye-health/understanding-astigmatism-symptoms%20) may include:

Blurry or distorted [vision](https://www.webmd.com/eye-health/default.htm%20)

Eyestrain

[Headaches](https://www.webmd.com/migraines-headaches/migraines-headaches-basics%20)

[Trouble seeing](https://www.webmd.com/eye-health/vision-basics%20) at night

Astigmatism Causes

Most people are born with it, but experts don’t know why. You can also get it after an [eye](https://www.webmd.com/eye-health/eye-assessment/default.htm%20) injury, an eye disease, or surgery.

Rarely, a condition called [keratoconus](https://www.webmd.com/eye-health/eye-health-keratoconus%20) can cause astigmatism by making the clear front part of your eye (your cornea) thinner and more cone-shaped. You’ll probably need contacts (but not glasses) to see clearly.

You can’t get astigmatism from reading in low light or sitting too close to the TV.

Astigmatism Treatment

Glasses or contacts can correct almost all cases of astigmatism. But if you have only a slight astigmatism and no other vision problems, you may not need them.

There are two treatments for the common levels of astigmatism:

Corrective lenses. That means glasses or contacts. If you have astigmatism, your doctor will probably prescribe a special type of soft [contact lenses](https://www.webmd.com/eye-health/contact-lenses-colored-soft-hard-toric-bifocal%20) called toric lenses. They can bend light more in one direction than the other. If your case is more severe, you might get gas-permeable rigid contact lenses for a procedure called orthokeratology. You wear the lenses while you sleep, and they reshape your cornea. You’ll need to keep wearing the lenses to hold this new shape, but you won’t have to wear them as often.

Refractive surgery. Laser surgery also changes the shape of your cornea. Types of refractive surgery include [LASIK](https://www.webmd.com/eye-health/lasik-laser-eye-surgery%20) and PRK. You’ll need to have otherwise healthy eyes with no retina problems or corneal scars.

Irregular astigmatism is far less common and is linked to problems with your cornea, the front part of the eye. Keratoconus is one example

2. Myopia (Nearsightedness)

**Nearsightedness**, or **myopia**, as it is medically termed, is a vision condition in which people can see close objects clearly, but objects farther away appear blurred. ... As a result, the light entering the eye isn't focused correctly, and distant objects look blurred.

What Causes Myopia?

The structure of your [eye](https://www.webmd.com/eye-health/ss/slideshow-eye-conditions-overview%20) is to blame. When your eyeball is too long or the cornea -- the protective outer layer of your eye -- is too curved, the light that enters your eye won’t focus correctly. Images focus in front of the retina, the light-sensitive part of your eye, instead of directly on the retina. This causes blurred [vision](https://www.webmd.com/eye-health/default.htm%20). Doctors call this a refractive error.

High **[myopia](https://www.webmd.com/eye-health/healthy-vision-as-you-age-14/quiz-checklist/default.htm%20)**: It’s a more serious form of the condition, where the eyeball grows more than it is supposed to and becomes very long front to back. Besides making it hard to see things at a distance, it can also raise your chance of having other conditions like a [detached retina](https://www.webmd.com/eye-health/eye-health-retinal-detachment%20), [cataracts](https://www.webmd.com/eye-health/cataracts/%20), and [glaucoma](https://www.webmd.com/eye-health/glaucoma-eyes%20).

Degenerative myopia: Also called pathological or malignant myopia, it is a rare type you usually inherit from your parents. Your eyeball gets longer very quickly and causes severe myopia, usually by the teenage or early adult years. This type of myopia can get worse far into adulthood. Besides making it hard to see things at a distance, you may have a higher chance of having a detached retina, abnormal [blood](https://www.webmd.com/heart/anatomy-picture-of-blood%20) vessel growth in the eye (choroid neovascularization), and [glaucoma](https://www.webmd.com/eye-health/video/glaucoma%20).

Symptoms

Chances are the only symptom is that more distant objects are blurred. You may also notice:

[Headaches](https://www.webmd.com/migraines-headaches/default.htm%20)

Squinting

Eye strain

[Eye fatigue](https://www.webmd.com/eye-health/eye-fatigue-causes-symptoms-treatment%20) when you try to see objects more than a few feet away

Children with myopia often have trouble reading the blackboard at school.

Diagnosis and Treatment

An [eye exam](https://www.webmd.com/eye-health/eye-tests-exams%20) can show you if you’re myopic. Glasses, contacts, or refractive surgery can usually correct the problem.

When you have myopia, your prescription for glasses or [contact lenses](https://www.webmd.com/eye-health/contact-lenses-colored-soft-hard-toric-bifocal%20) will be a negative number. The more negative the number, the stronger your lenses will be. For example, -3.00 is stronger than -2.50.

Your prescription helps the eye focus light on your retina. That clears up your [vision](https://www.webmd.com/eye-health/ss/slideshow-healthier-eyes%20).

Eye surgery can improve your vision so much you may no longer need to wear glasses or contacts. The most common procedures for myopia are:

Photorefractive keratectomy: Also called PRK, this surgery uses a laser to sculpt the middle layer of your cornea. That flattens the cornea’s curve and lets light rays focus closer to or on your retina.

[LASIK](https://www.webmd.com/eye-health/lasik-laser-eye-surgery%20) : This is the most common surgery for myopia. The surgeon uses a laser or another tool to create a thin flap on the top layer of your cornea. He sculpts the cornea with another laser and moves the flap back into place.

In the case of high myopia, special contacts or atropine eyedrops have been found to be effective in slwing the progression. In some cases, your doctor may suggest catarct or clear lens replacement surgery.