

Multifocal lenses

Presbyopia

The tiny lens inside the human eye changes its shape to let us see clearly at different distances. As we get older the lens begins to lose its flexibility, which makes it increasingly more difficult and tiring for us to change our focus and to see close objects clearly. The difficulty in focusing-when reading and sewing and other close tasks are affected-becomes noticeable about the age of 40 to 45 years.

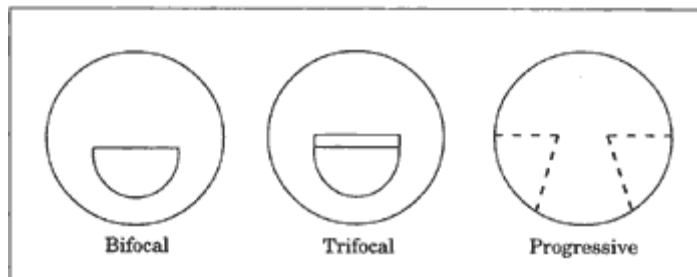
This condition is called presbyopia. It can be corrected by spectacle lenses that restore our power to see at near range.

Reading spectacles are prescribed to help people see close up. These spectacles cannot be used to see in the distance, so the wearer will continually find it necessary to remove the reading spectacles when looking at people when talking to them, when viewing television while knitting or looking across the room or the street. While driving, it is necessary to constantly scan the road and the instrument panel and a single-vision lens will not permit this.

Multifocal lenses

Multifocal lenses enable the wearer to focus on both near and distance and, depending on the lens type, on middle distances, without removing his or her spectacles.

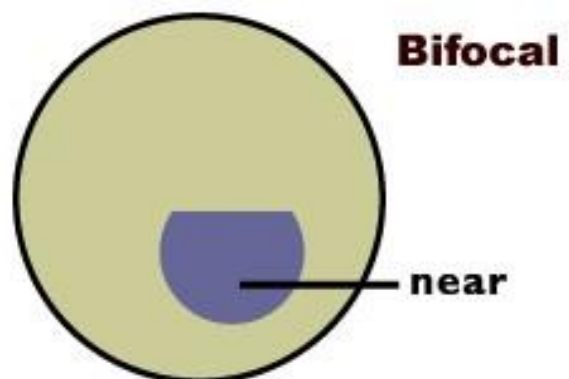
There are three main kinds of multifocal lenses: bifocal, trifocal and progressive.



- **Bifocal lenses**

There are two distinct areas to a bifocal lens. In most cases the top portion is used for distance viewing and the lower portion for reading and other close work such as sewing.

The lower portion may be semi-circular, D-shaped, a narrow band or simply divided from the upper portion by a straight line. Your



optometrist can help you choose the kind of bifocal that will best suit your requirements.

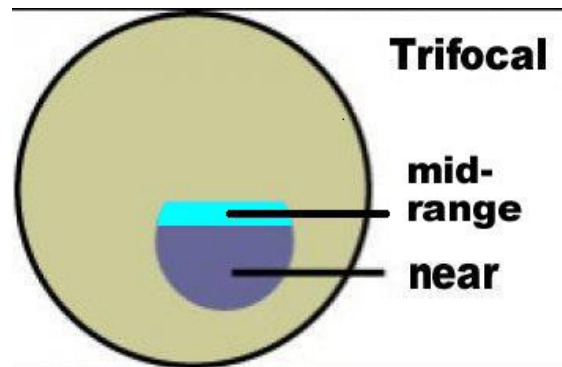
If spectacles are already worn for distance vision, the onset of presbyopia means you will need either a second pair of spectacles for reading range or bifocal lenses incorporating prescriptions for both distance and near ranges.

For people who need near-range correction only, bifocals are still an excellent alternative to single vision lenses because they will avoid the inconvenience of removing the spectacles for distance vision.

- **Trifocal lenses**

It is important for some people to be able to focus clearly at mid-range between distance and near. For example, Musicians may need to see their instruments close up and read music at arm's length while still being able to see the conductor in the distance. Someone with these needs will require trifocals, which give clear vision at three distances- far distance, middle distance and near.

There are three portions to a trifocal lens. The top, which is usually the largest portion, is for distance; the middle section is for seeing at intermediate distances such as at arm's length; and the lowest part is for reading and other close work.



The dividing lines between the three portions may be curved or straight, just as with bifocals. Trifocal lenses have these portions in different positions to cater for particular needs.

Your optometrist will help you choose the type of lens that is best for you.

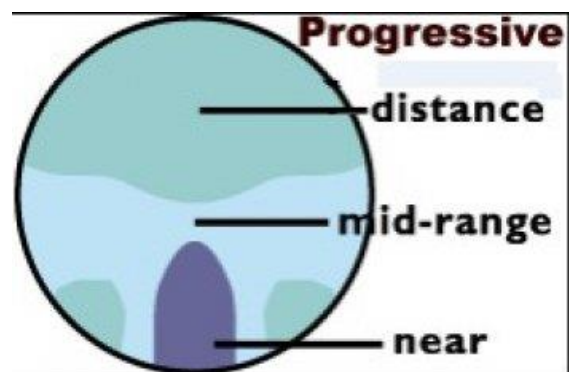
- **Progressive lenses**

In progressive lenses, or varifocals as they are also called, the lens power changes gradually from distance correction through the intermediate powers to the reading prescription.

Unlike a trifocal, progressive lenses do not have definite dividing lines between the different portions of the lens- they merge into each other. Instead of distinct segments, there is a gentle change from distant to intermediate to near focus parts of the lens.

The wearer has an infinite number of focusing distances; the nearest one can get to having natural sight with prescription spectacles. All distances are sharp and clear.

Most people think that the progressive lenses look better than bifocals or trifocals because,



like ordinary single vision lenses, there are no obvious lines across the lenses. Some people are reluctant to wear multifocal lenses because they associate them with older people. Progressives offer then the best of both worlds- the benefits of Multifocals and a young appearance.

Another advantage of progressive lenses is that because there is no sharp line dividing portions of the lens, there is no obstruction to vision through image jump, which makes it safer to use stairs and escalators.

Generally, people find that adapting to progressives is fast and easy. Some people are aware of distortion at the sides of the lenses when first wearing progressives but adapt readily, as with any new pair of glasses.

Which one to choose

Just as people's circumstances are different, so their spectacle requirements are different. What is best for one may not suit another. Your optometrist will be happy to discuss your requirements with you and advise you on the most appropriate lens type for your lifestyle.

Ask your optometrist for these related brochures

- Presbyopia
- Bifocals