

Seeing Differently Out of Two Glasses With the Same Prescription

Infrequently a patient will see differently out of two pairs of glasses that have the same prescription.

The optician examines both pairs and tells the patient that the two glasses have the same prescription in each pair.

Yet the patient knows he sees differently out of the two pairs.

What is going on?

Other factors than the power of the lenses also help determine how you will see. Many of these reasons center around how the lenses are sitting in front of your eyes in the two frames:

- How far from your eyes do the lenses sit? Plastic frames usually hold the lenses closer to your eyes; metal frames usually hold the lenses out farther. Farsighted people wear magnifying lenses, and magnifying lenses increase in power the further they are from the patient's eyes (decrease in power the closer they are to the patient's eyes). Nearsighted people wear minifying lenses, and minifying lenses decrease in power the further they are from the patient's eyes (increase in power the closer they are to the patient's eyes).
- 2. Do the lenses in one frame sit up higher or lower relative to your eyes? If they do, then you are looking through a different part of the lenses with each pair of glasses. Your vision out the top of a lens is different than your vision through the middle of a lens.
- 3. Is one pair of glasses crooked? Different vision will result if the frames have different slopes relative to your eyes.
- 4. Have the lens or lenses in one pair of glasses turned? The result will be the same as if the frame was crooked.
- 5. Do both frames have the same curvature around your face? Lenses in a frame that is flat across your face will give different vision than lenses in a frame that is curved around your face. A frame that is "butterflied out" will give very different vision. The two frames need to be adjusted the same way.
- 6. Do both frames have their bottoms tucked in toward your cheeks to the same degree? If one frame has a 5 degree tilt inward at the bottom, and another frame has a 15 degree tilt, vision will be different in the two glasses. The two frames need to have the same tilt, whichever tilt it is.





- 7. Is the color and amount of tint in the lenses the same? Tint blocks out some light, which for most people makes it harder to see. But for a significant number of people, they see better and more comfortably with more tint. Some tint colors filter out different shades of color of incoming light, resulting in different vision.
- 8. Are the lenses the same size? The further one looks away from the center of a lens, the worse the optics become. Patients sometimes think smaller lenses give better vision because the optically poorer parts of the lenses have been eliminated.
- 9. Are the lenses made out of the same lens material? Patients see differently out of plastic or glass lenses as compared to polycarbonate lenses and high index (extra thin) lenses, especially near the edges of the lenses.
- 10. Are the two pairs of glasses being used the same way? Your office glasses with its bifocal may not focus well on a computer screen and consequently give you eye strain; while your other pair at home that you never try to use at computer distance may never give you a headache.

Most of the above problems can be corrected by adjusting your frames differently, so that your vision will be different.

The way one frame is adjusted often does not make it "better" than the other frame's adjustment, just different. Whatever glasses you wear most is the one you are used to and is the one that seems "correct."

