

Table 3-1.
Comparison of Visual Acuity and Refractive Errors

Myopia	Expected Acuity
-0.50	20/25—20/30
-1.00	20/40
-1.50	20/60
-2.00	20/100
-3.00	20/200—20/300
-4.00	20/400

Correlating Refractive Error with Visual Acuity

OphT

The unaided visual acuity of a myopic person should correlate to the amount of myopia present (Table 3-1). This is a useful guide to help the examiner evaluate the possibility of over minusing a patient. One must be observant when assessing unaided acuity because some patients will attempt to squint to provide better vision.

Latent Nystagmus

Some patients are prone to nystagmus when one eye is covered (latent nystagmus). This can pose a problem for the examiner since an eye with constant movement will have decreased vision. Therefore, the fellow eye must not be occluded. Granted, this would make decision-making difficult for the patient as lenses are changed since the vision in one eye remains the same. Removing the occluder is still possible, however. A high-powered plus sphere lens (+8.00 over the estimated refractive error) is used to blur the vision of the fellow eye. Since the eye is not actually occluded, the latent nystagmus is resolved, and the vision is blurred to the extent that the chart cannot be read.

Spectacles of Refractometry (The Return of the Glasses)

OphT

Despite the best efforts to prescribe the ideal combination of lenses for a patient, some people will return to the office with a frown on their face and their new spectacles in their hand. There is a seemingly infinite number of reasons why patients are not happy with their new glasses. It could be that the lenses were made incorrectly, a different base curve was used, or a significant change in lens power is not tolerated, to name just a few. This section will briefly describe a systematic approach to help isolate the cause of the patient's unhappiness.

OptP

The first and probably the simplest step is to measure the power of the lenses using a lensometer. Compare the measurements to what was prescribed. There should be less than 0.25 D difference in power of sphere or cylinder, and the cylinder axis should be within a couple of degrees. (Remember that those individuals with high amounts of astigmatism cannot tolerate *any* error in cylinder axis.)

OptP

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In most cases, the power of the lenses matches the prescription provided. So, the search for the problem continues. Mark the optical centers of each lens using the lensometer. Compare the patient's interpupillary distance with the distance between the optical center of the lenses. If the

OptP

OphA