

Table 6-1

ACCOMMODATION TABLE

DISTANCE	-4 MYOPE	-2 MYOPE	EMMETROPE	+3 HYPEROPE	+5 HYPEROPE
20 feet	Can't see it	Can't see it	None	3 D	5 D
1 meter	Can't see it	Can't see it	1 D	4 D	6 D
50 cm	Can't see it	None	2 D	5 D	7 D
25 cm	None	2 D	4 D	7 D	9 D
20 cm	1 D	3 D	5 D	8 D	10 D
10 cm	6 D	8 D	10 D	13 D	15 D

The amount of accommodation 5 different patients must use in order to see objects at 6 specific distances. Note that for each myope, there are distances where he cannot see the object regardless of whether he accommodates or not. Note also that each hyperope must accommodate at all times to see things in focus. At every distance, the myopes accommodate less than the hyperopes and emmetropes. See, being a myope isn't all that bad.

to remember is that most 44-year-olds have about 4 D of accommodation (it is easy to remember because it is all fours). As a general rule, the average 44-year-old has lost about 1 D of accommodation every 4 years since childhood. After age 44, he will lose 1 D of accommodation every 8 years or so until he is a few years over 70 and won't have any accommodation left at all. You can figure it out yourself, but the average 20-year-old will have somewhere between 10 and 12 D of accommodation left, while the average 68-year-old will have about 0.50 to 1.50 D left.

The big trick to presbyopia is that no one can comfortably use all of their accommodation over an extended period of time—most people can comfortably sustain only one-half of their accommodative potential. Therefore, although a 20-year-old emmetrope may have 10 D of total accommodation available, and can see an object placed at 10 cm away, he can't comfortably read text there for an extended period of time. He can only sustain accommodation of 5 D (half of the total 10 D that he has) and, therefore, can comfortably read text of significant length no closer than 20 cm away.

Emmetropes tend to become symptomatic when they're in their early-to-mid-40s. The average 44-year-old, remember, has about 4 D of accommodation available, and can only comfortably use half of that (2 D). Therefore, the 44-year-old emmetrope can hold text no closer 50 cm away if he wishes to read it comfortably. Fifty centimeters away is kind of far, but it is able to be done, and it explains why most 44-year-olds sitting in a dimly lit restaurant will hold their menus at arms distance. In my practice, I've found that the classic age for an emmetrope to get his first pair of reading glasses is 42 years old.