

Your Aunt Peg got her first pair of reading glasses (+2.0 D) when she was 52. She is approaching 78 and has told you she has trouble reading your letters. Being frugal she has never bought a new pair of reading glasses. She complains that she has to put your letters so far away she cannot even hold them. In fact, she told you that she has to place the letters on a holder and stand 80 cm away (as measured from her eyes) to read them. You can just see her reading your letters standing back from her music stand with her glasses down her nose. She has always worn her glasses in the same place, about 2 cm down her nose. You can vividly remember her peering over those glasses to lecture you when your soccer ball careened through her petunias when you were younger. You know that money is tight for your aunt and want to surprise her with new glasses. You remember from physics that it is normal to have the near-point at about 10 inches (254 mm). What prescription does she need now or what information would you need to know to determine her prescription?