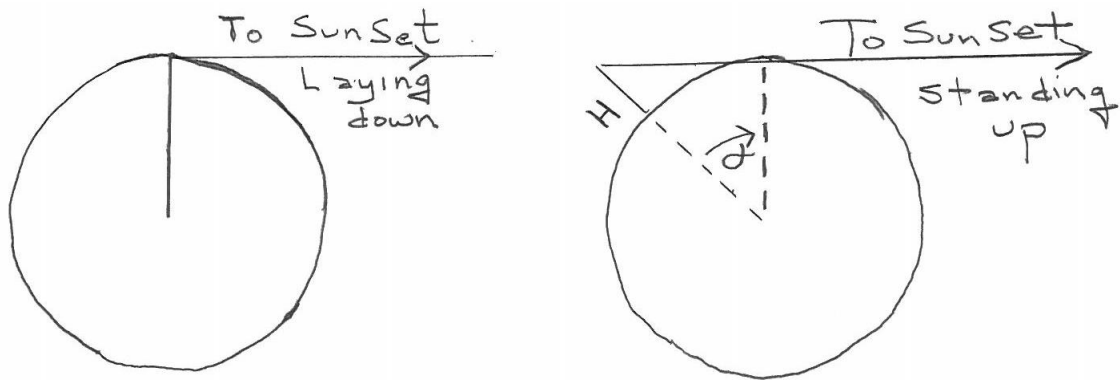


P.1.19 A hard Problem can be made simple with a good diagram.  
 Step #1 for solving many Problems is to draw a good Diagram  
 of the conditions stated in the Problem.  
 Here is my Diagram for this Problem



P.1.18 The Length of the Day increases by 1 millisecond every Century.  
 Let  $\Delta t$  = the increase in the Length of the Day after just 1 Day.  
 Then "The Total of the daily increases in time for N Days" is

$$= 1\Delta t + 2\Delta t + 3\Delta t + 4\Delta t + 5\Delta t + \dots + N\Delta t$$

This is an "Arithmetic Series". Math Books explain how to find  
 its Sum if you do not remember or can not deduce it.  
 You might Google "arithmetic series"

I think that this Question could have been worded better:

If the Day was constant and equal in time to  $t_0$ ,  
 then the Length of N days would be  $Nt_0$ .

In Reality this duration of N days is = T.

"The Total of the daily increases in time for N Days"

is =  $T - Nt_0$ . This is what the Problem is asking for.