Homework 1

1. At Madison, Wisconsin, what is the apparent solar time corresponding to 10:30 AM central time on February 3? In Madison, the longitude is 89.4◦ and the standard meridian is 90◦.

   A: 10:19

2. Calculate the zenith and solar azimuth angles for $\phi = 43°$ at AST **a)** 9:30 AM on February 13 and **b)** 6:30 PM on July 1.

   A: a) 66.22; -40.27 b) 79.59; 112.0