

AST 250 – Fall 2017
Homework Due: Monday August 28

2. Calculate the elevation of the NCP above the horizon for an observer at latitude ϕ . The geometry below may be helpful.

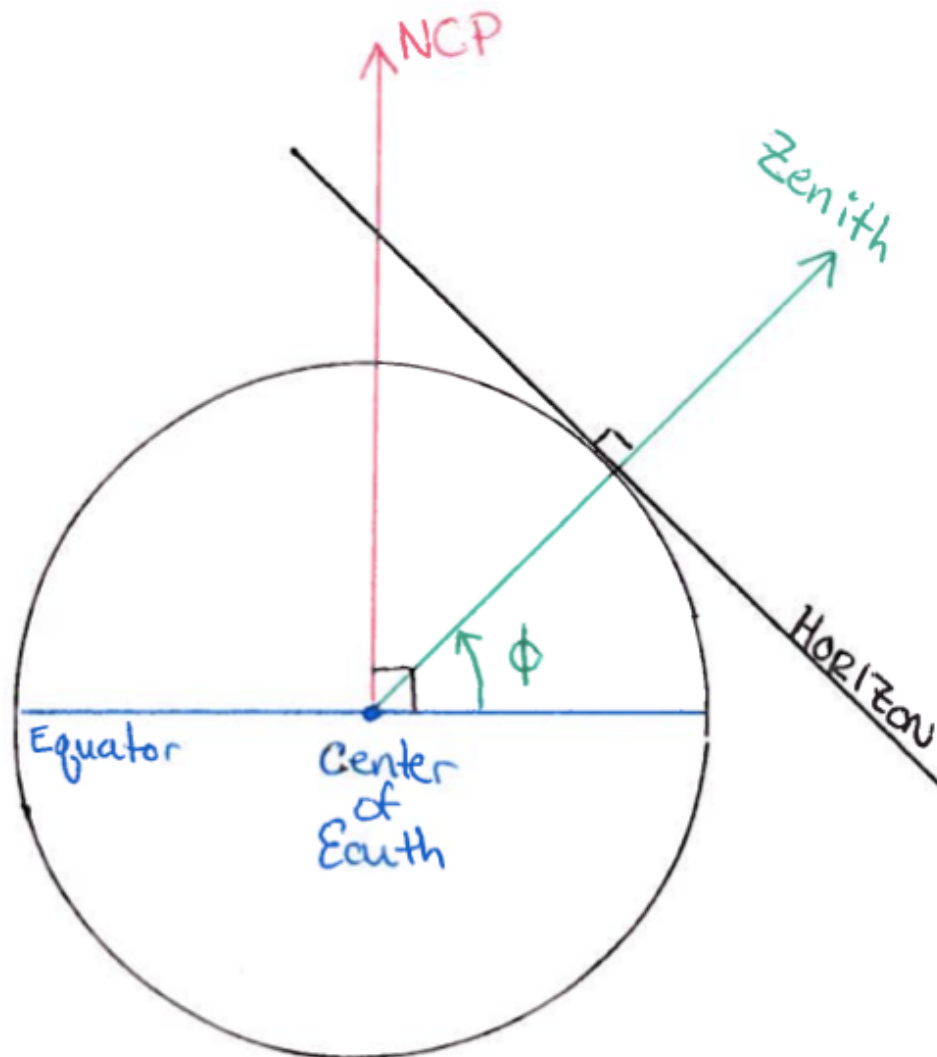


Figure 1: Geometry for problem 2

3. At a given latitude, ϕ , what distances (in km) corresponds to a 1 second, 1 minute, and 1 hour difference in LST? Hint: Calculate this at the equator first then think about how to modify it for $\phi > 0$.