

AST 250 – Spring 2018
Homework Due: Friday January 19

2. Calculate the elevation of the North Celestial Pole (NCP) above the horizon for an observer at latitude ϕ .

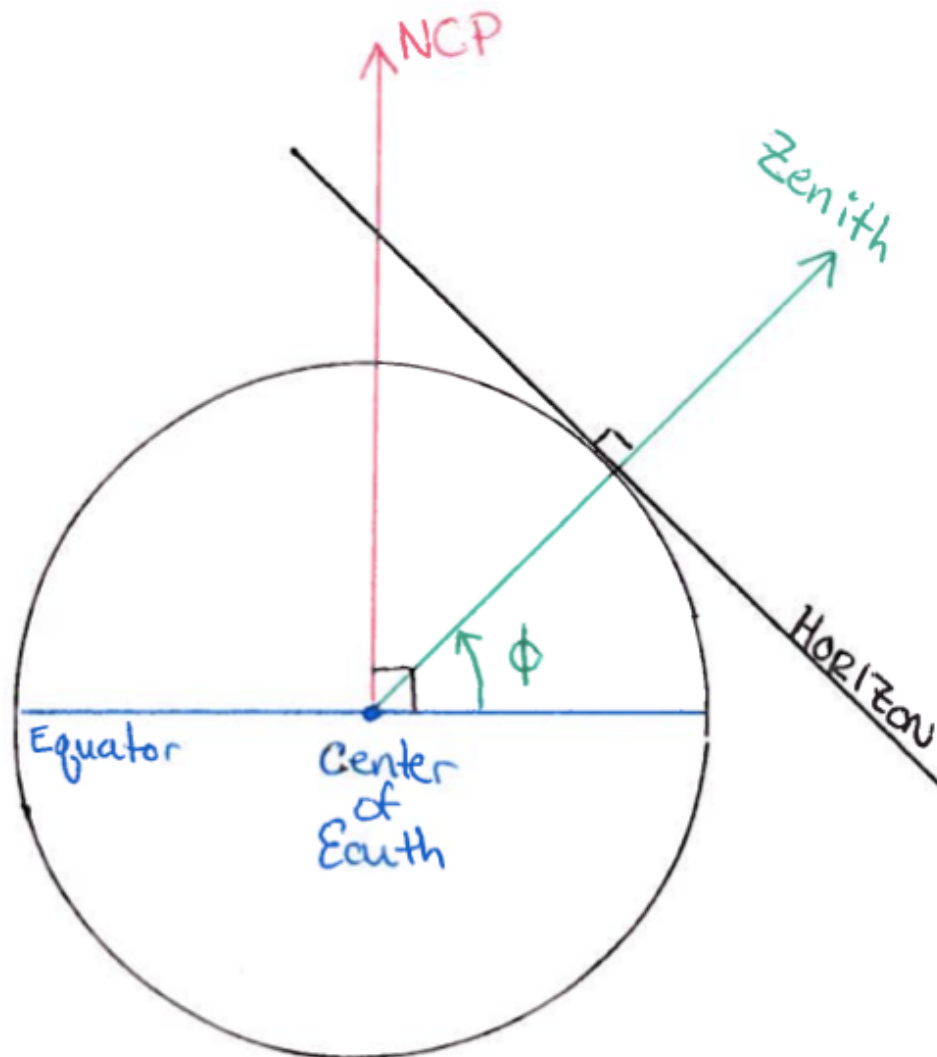


Figure 1: Geometry for problem 2

3. Imagine you want to observe a source simultaneously at Arecibo Observatory in Puerto Rico ($66^{\circ} 42' 56.63''$, $+18^{\circ}, 28', 20.8''$) and at Kitt Peak Observatory ($111^{\circ} 35' 59''$, $+31^{\circ} 57' 50''$). What is the *difference* in LST (h m s) at any given instant between these two observatories?