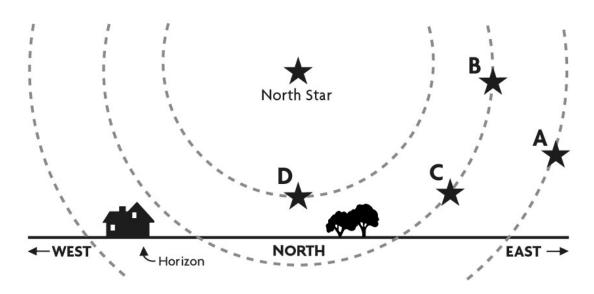
## Astronomy Ranking Task: Motion of the Sky

## Exercise #3

**Ranking Order:** 

**Description:** The figure below shows the evening sky as it would appear while looking north at 9PM tonight for an observer in the northern hemisphere. Notice that Polaris, the North Star, appears fairly high in the sky – while other stars (labeled A - D) appear to slowly move counterclockwise in great circles around the North Star.



**Ranking Instructions:** First, at the location of each star (A - D) draw a short arrow to indicate the <u>direction</u> that each star will appear to move for the instant shown. Next, rank the stars (A - D) in the order that these stars first appear in the eastern part of the observer's sky for the day shown. The four arrows you would draw on the paper at each star must point in what direction?

## First star to appear in the eastern part of sky 1 \_\_\_\_ 2 \_\_\_ 3 \_\_\_ 4 \_\_\_ Last to appear in the eastern sky. Or, all these stars would appear in the eastern part of the sky at the same time. \_\_\_\_ (indicate with check mark). Carefully explain how you know this is true: