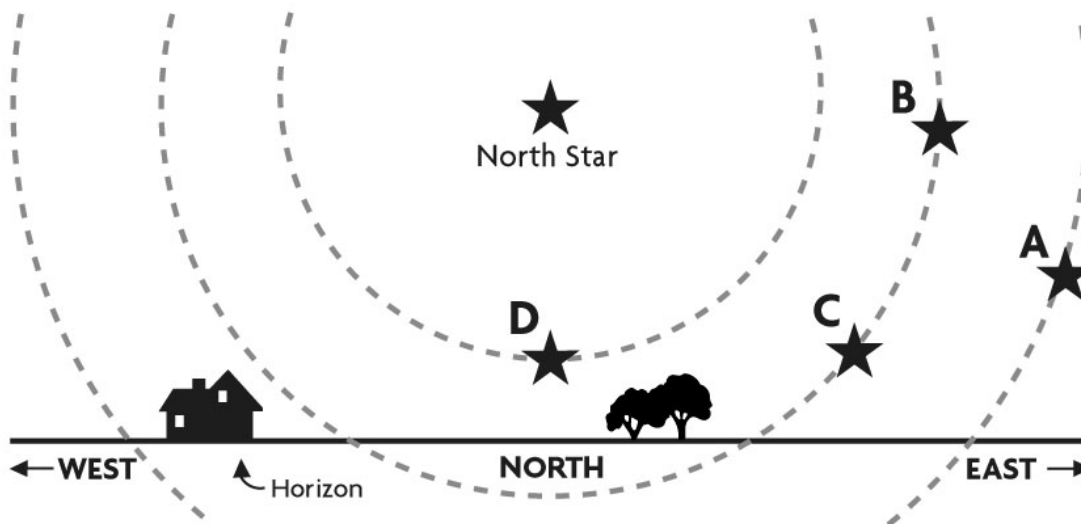


Astronomy Ranking Task: Motion of the Sky

Exercise #5

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 Polaris, the North Star, appears fairly high in the sky – while other stars (labeled A - D) appear to slowly move counter-clockwise 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 direction that each star will appear to move for the instant shown. Next, rank the stars (A – D) in order of the number of hours (from greatest to least) that each star is above the horizon during each 24 hour day.

The four arrows you would draw on the paper at each star must point in what direction?

Ranking Order:

Greatest number of hours above horizon 1 ____ 2 ____ 3 ____ 4 ____ Least number of hours above horizon.

Or, all the stars are above the horizon the same number of hours per day. _____ (indicate with check mark).

Carefully explain how you know this is true:
