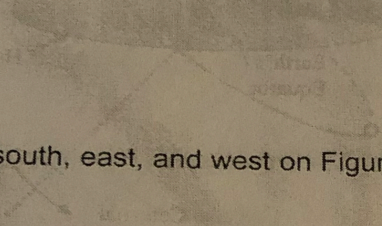


- 6) Star A is just visible above your eastern horizon at Position 1. At which of the numbered positions is it just visible above your western horizon?
- 7) At which position(s), if any, does Star B rise and set?
- 8) Two students are discussing their answers to Question 7.

Student 1: *Locations B1 and B3 are on my horizon because they are rising and setting just like A1 and A3.*

Student 2: *Figure 1 shows that Star B is as low as it will get when it is just above the northern horizon at B4. So Star B never goes below the horizon.*

Do you agree or disagree with either or both of the students? Explain your reasoning.



- 9) Label the directions north, south, east, and west on Figure 1. Check your answer with another group.
- 10) For each indicated position, describe where in the sky you must look to see the star at that time. Each description requires two pieces of information: the direction you must face (north, northeast, east, etc.) and how far above the horizon you must look (low, high, or directly overhead). If you cannot see the star, state that explicitly. The descriptions for four positions are given as examples.
- a) A1: *east, low*
 - b) A2:
 - c) A3:
 - d) A4:
 - e) North Star: *north, high*
 - f) B1:
 - g) B2: *directly overhead*
 - h) B3: *northwest, high*
 - i) B4:

Check your answers with a nearby group and resolve any inconsistencies.

- 11) Does Star B ever set?