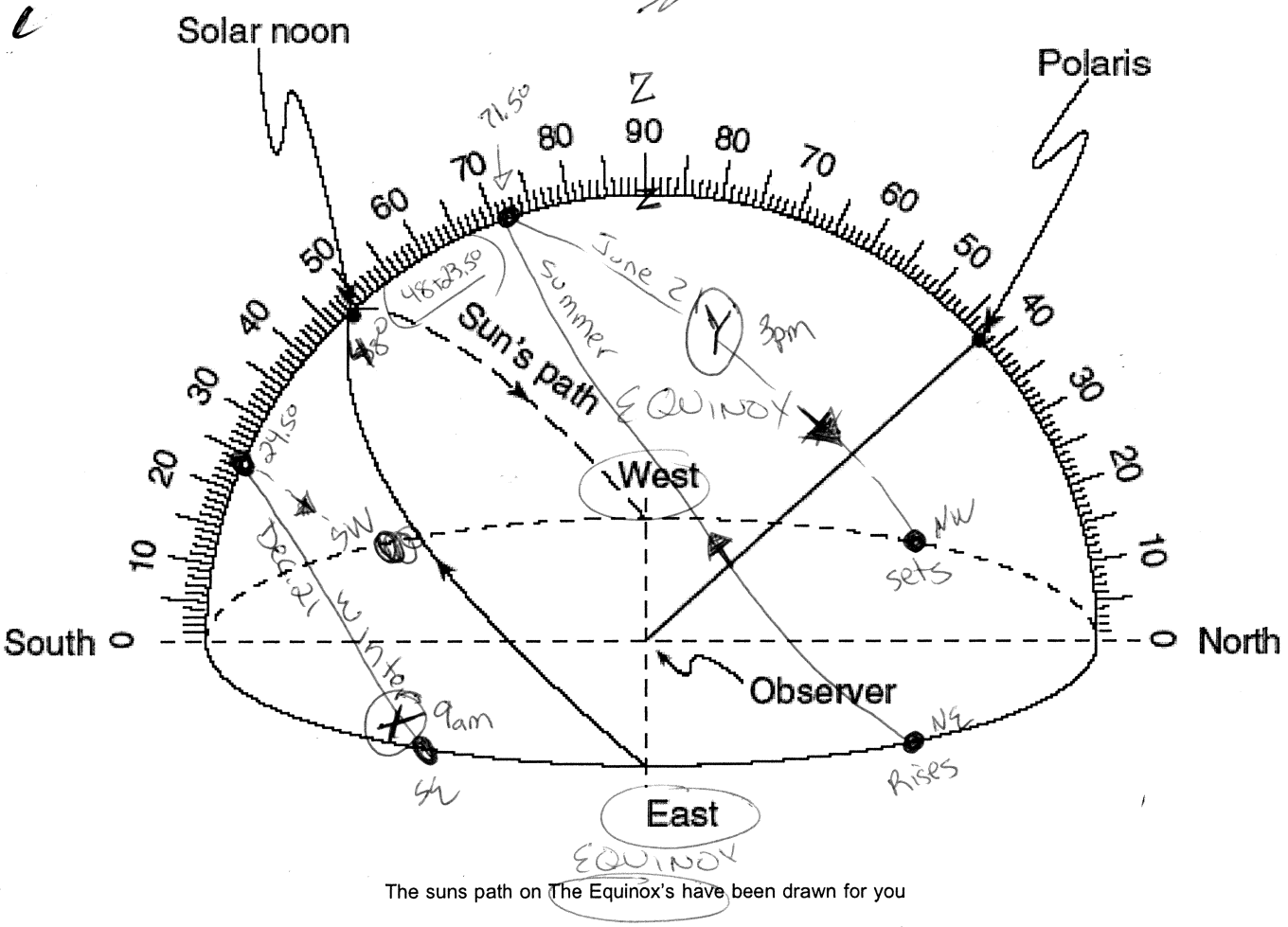
KEY



The suns path on The Equinox's have been drawn for you

1. What dates are represented by the suns path shown? March 21 / Sept. 23
2. What is the latitude of the observer? Polaris = 42°N
3. How did you figure out the latitude? Polaris : Latitude
4. During the summer the Earth is tilted Toward the sun at an angle of 23.5° degrees.
5. Draw in the sun's path for June 21st. (Be careful here, use your answer to the last question to help you). Summer = 23.5° higher. Rises NE. Sets NW
   Draw a large dot representing the suns location at noon. Label this path summer
6. Draw in the suns path for December 21st. Draw a large dot representing the suns location at noon. Label this path winter Rise SE Sets SW altitude = 48° (equinox) − 23.5° = 24.5°
7. Place an X on the winter path representing where the sun would be at 9 a.m.
8. Place an Y on the Summer path to represent the sun at 3 p.m.
9. Place a Z at the zenith. Point Directly Overhead / 90°
10. If you travel south from this location, what happens to the altitude of Polaris?
    Latitude ↓ Polaris Decreases ↓