

Exercise 2

Due Tuesday, September 8, 5:00 pm

1. In your own words, describe the path of the sun across the sky, as viewed from Utah, in late March or late September (at the “equinox”).
2. Recall that the angle between the northern horizon and the north celestial pole is equal to your latitude, about 41 degrees in Ogden, Utah. At the equinox, the position of the sun in our sky lies on the “celestial equator,” an imaginary circle in the sky that is directly above earth’s equator. Suppose that you are viewing the sun at its highest point in the sky at the equinox. What is the angle between the sun and your horizon? Explain your answer with a sketch.
3. Describe the path of the sun across the sky, as viewed from Utah, in late June (at the summer solstice), and in late December (at the winter solstice).
4. Why is it hotter in summer than in winter?

