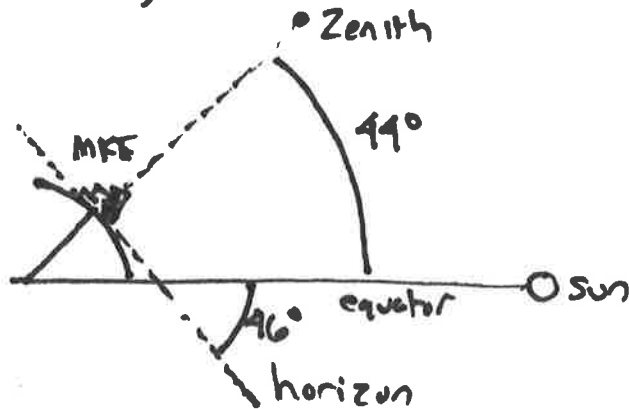


ASG VI Ex 7.2 (Altitude of Sun)

- a) In Milwaukee (44° N lat.) on the vernal equinox, the sun is 44° below the zenith, or 46° above the horizon, as can be seen from the diagram:



- b) In MKE on the summer solstice, the sun is 23° (approx) above the celestial equator, which puts it 21° from the zenith, and 69° from the horizon.
- c) In MKE on the winter solstice, the sun is 23° below the celestial equator, 67° from the zenith, and 23° above the horizon.
- d) For someone standing on the equator on the winter solstice, the sun is 23° south of the zenith, and 67° above the southern horizon.
- e) For someone standing on the equator on the summer solstice, the sun is 23° north of the zenith, and 67° above the northern horizon.