## Ancient Astronomy Midterm Outline

For Midterm on Monday, Oct. 9, 2023 — Covering Evans through Chapter 4

This is an outline of possible topics for midterm questions which follows closely what we covered.

I italicized two that we didn't mention in class. Those occurred to me later.

- 0. Hour/minute/second to decimal angle conversions needed for various other problems
- 1. The nightly motion of the stars
- 2. The annual motion of the Sun along the Ecliptic
- 3. The Tropic of Cancer, Tropic of Capricorn, North Celestial Pole, South Celestial Pole, Celestial Equator and the First Point of Aries
- 4. Interpret a gnomon (shadow) plot or interpret a sundial reading (but no need to be able to reproduce the whole sundial-construction procedure)
- 5. Apply relationship between zenith angle, latitude, and declination (including when the star is north of you, which messes with signs in the formula
- 6. The phases of the Moon
- 7. An Eratosthenes-style calculation
- 8. An Aristarchus-style calculation (but not the complicated and wrong one that we did)
- 9. Application of Tables of Ascensions, including length of night, length of day, time of year, seasonal hour, and culmination time
- 10. Calendrical conversions