

Make sure you answer every part of the question. Write out your answers (neatly!) and bring them to class on Tuesday. Some of these questions are closely related to questions from SZE but they are not necessarily identical—be sure that you are doing the right question!

- A. What are examples of *a priori* knowledge? *A posteriori*? What are examples of analytic statements? Synthetic? Are these categories unequivocal?
- B. Assuming spherical geometry, compute the ratio of the circumference to the radius of a circle, drawn halfway between equator and pole. How does it compare to the Euclidean ratio of 2π ? (The radius should be measured along the straight lines of spherical geometry, the great circles.)
- C. Write up the surveyors' experiment from SZE Ch. 13 as you would a piece of lab work, with a description of the apparatus, the method, the results, and the conclusion. Show how it is that many conclusions about the geometry of space are possible.