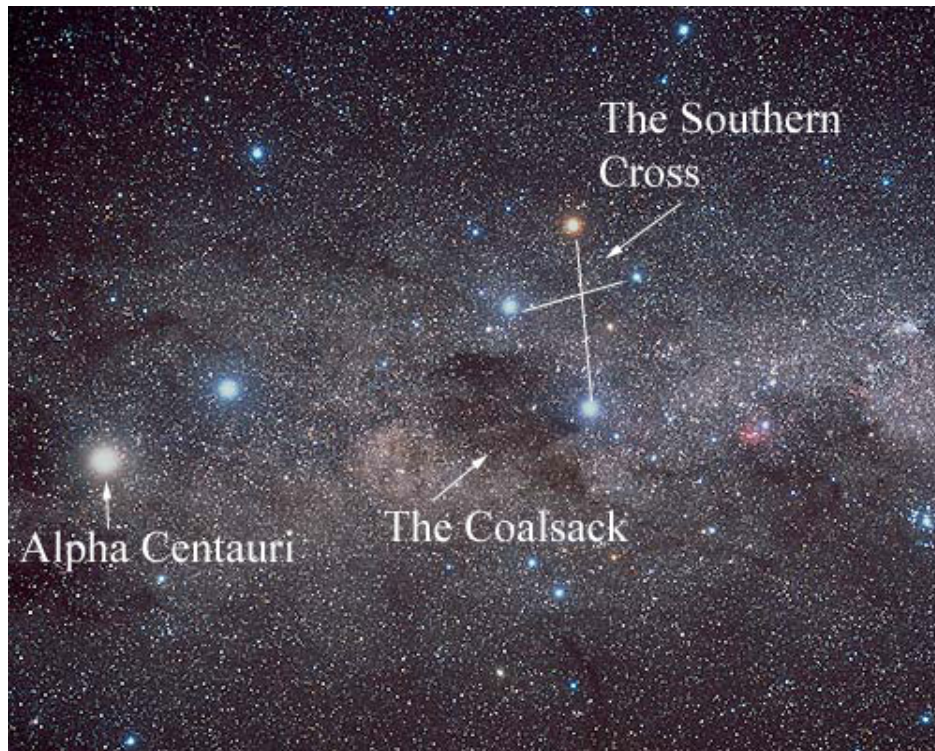


**AST 250 – Spring 2018**  
**Homework Due: Friday February 2**

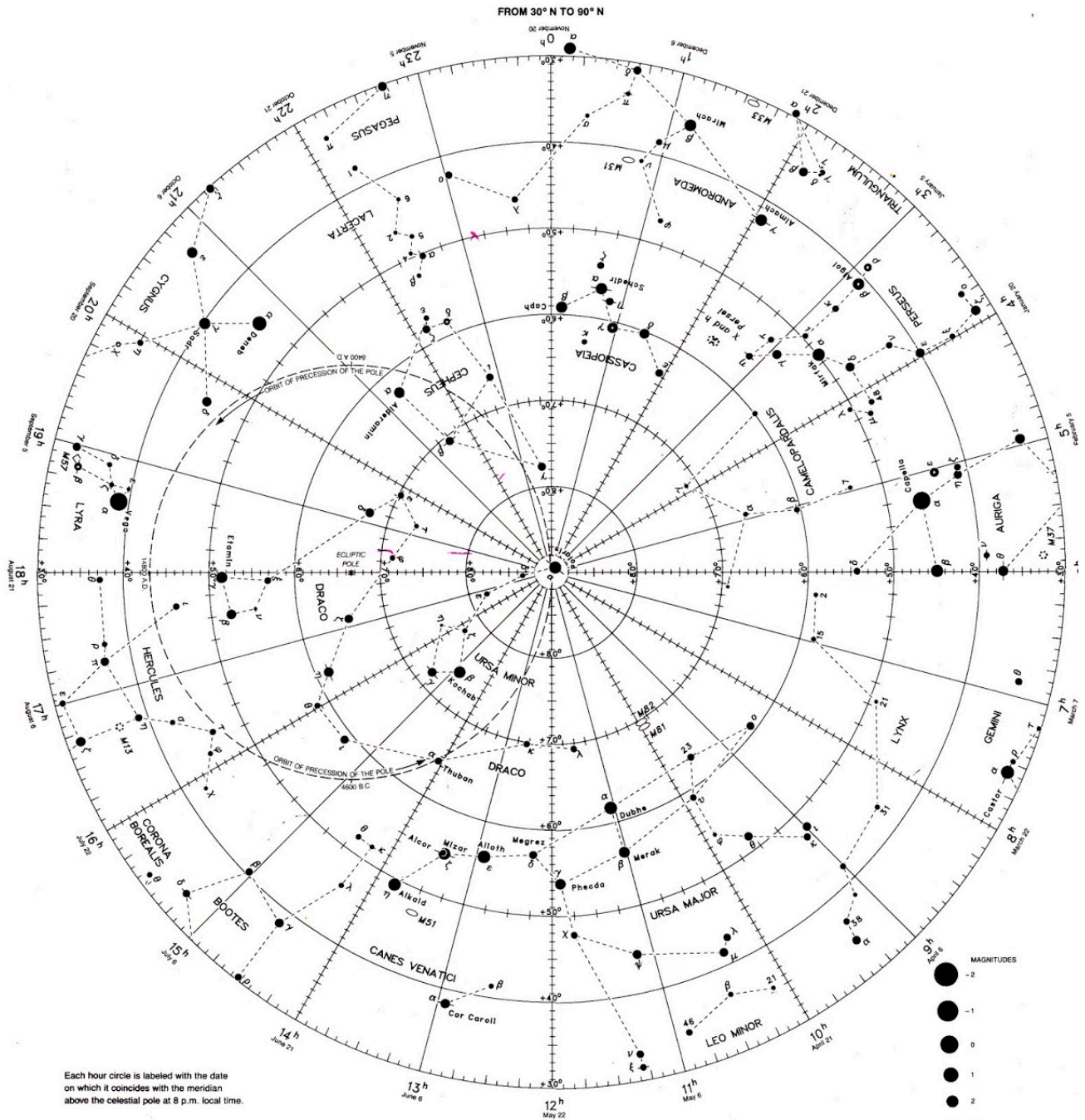
11. If you were standing on a planet in the Alpha Centauri system ( $D = 1.34$  pc at  $\alpha, \delta = 14^{\text{h}} 40^{\text{m}}, -60^{\text{d}} 50'$ ), what apparent magnitude would the Sun appear in the sky (quote your answer to 1 decimal place) and toward which constellation(s) would the Sun appear (mark the position on the star chart on the back)?



12. Since magnitudes are logarithmically related to flux, you cannot simply add two magnitudes together to find the total apparent magnitude of an unresolved binary star. Assume you have two stars which have individual apparent magnitudes of 3 and 4. What is the apparent magnitude of the unresolved pair of stars?

# SC002 CONSTELLATION CHART

NORTH CIRCUMPOLAR REGION — EPOCH 2000



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- MAGNITUDES
- -2
  - -1
  - 0
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
- GALAXY
  - CLUSTER
  - ◇ NEBULA
  - VARIABLE STAR
  - DOUBLE STAR