

ASTR121, Introduction to Astrophysics: Stars and Beyond
Prof. Doug Hamilton, Spring 2008
Practice Exam II Problem (No calculators, no notes)

1. a) Draw an HR diagram (labelling both axes) for a star cluster whose stars all formed 10 Gyr ago. Label the main sequence, the red giant branch, the horizontal branch, and the asymptotic giant branch.
- b) Describe the properties of the stars of the cluster that are on the main sequence.
- c) Show where the white dwarfs are. Which stars are likely to supernova soon? Which ones are likely to form planetary nebula soon?