Astro 421 Homework: Due Feb 9 2017 Start easy to get into the swing of things

S+G refers to the textbook

1) S+G 1.3 and 1.8 both about stellar luminosities and a reintroduction to magnitudes (I did not cover magnitudes in class, but they are clearly described in the text)

2) S+G 1.4 Energetics of nuclear burning and E= ϵ mc2, where ϵ is efficiency.

3) S+G 1.12- need to understand black body formula (not covered in class)

4) Briefly explain why the light from galaxies is dominated by different types of stars as a function of age and star formation rate.

5) Give a short description of the 3 of the differences between

elliptical and spiral galaxies in an observational and physical sense.