Assignment 7

Please type your responses into a word document, and submit that on UNM Learn. Show your work for all questions. You can take scans/pictures of your work if you put them in the word document, but don't submit them as images. Be sure to number your responses 1, 2(a), etc. so I know which question you're answering. If you get stuck, post a question on the forums. Chances are you're not the only one!

- 1. (16 points) Briefly define and differentiate between an asteroid, a comet, a meteor, and a meteorite.
- 2. (10 points) "I watched the meteor shower yesterday. I hope the Big Dipper isn't the next one to go, that's my favorite constellation!" your friend confides in you. Correct his response.
- 3. (35 points) We discussed the formation of the solar system from the nebular cloud.
 - (a) (15 points) Summarize in your own words the formation of the solar system from the solar nebula to the present solar system. Include terms like nebular cloud, accretion, protoplanet, protostar, and planetesimal.
 - (b) (5 points) Why are the planets of the outer solar system so much larger than those of the inner solar system?
 - (c) (5 points) How is our solar system different than typical stellar systems?
 - (d) (5 points) What are "hot Jupiters", and how do they come to be?
 - (e) (5 points) When did the solar system start forming?