Study sheet for new material on Astronomy final. You don't need to know things at a level deeper than we covered in class/on HW. For reference, I will have my notes written up and available by the end of today (Fri 12/06/2019)

You should:
Understand the idea of the "distance ladder" in astronomy means.

Understand what parallax is and how to use it to find the distances to astronomical objects.

Understand the difference between apparent and absolute magnitude.

Understand what it means for a star to be on the main sequence.

Know roughly what mass range stars can have (as multiples of sun's mass).

Know the net nuclear reaction that powers all main sequence stars (4 Hydrogen fusing to 1 Helium nucleus).

Understand what an H-R diagram is and what it's used for and where on it the main sequence is (roughly). Also Understand the trends in stellar parameters (e.g. where on the HR diagram would large cool stars be, where on the main sequence are more massive stars, etc.)

Be able to calculate brightness (flux received) from luminosity and distance (or any permutation)--this is really review—we've been doing this all along.

Know how stars like our sun are expected to develop (from pre-solar gas cloud through the end of its life).

Know how a star 25 times as massive as our sun has developed (from pre-star gas cloud through the end of its life).

Understand how supernovas of known intrinsic brightness (Type Ia supernovas) can be used to provide distance determinations.

Understand roughly what a black hole is.

Understand what a galaxy is.

Understand that galaxies form clusters, clusters form superclusters.

Understand that at the largest scales, the universe seems fairly uniform in its properties.

Understand that the universe seems to be expanding and what that implies about possible origins.