March 12, 2019 MSE 2103 topics

- Test review; midterm grade review
- Measuring stellar masses
 - the Doppler effect and radial velocity measurements
 - the majority (~60%) of stars are in binaries and multiples
 - obtaining the masses from radial velocity curves
- The mass-luminosity relationship
- Computing principal stellar parameters across the H-R diagram
 - given the temperature, what is the luminosity of a MS star?
 - $^{\circ}\,$ given the luminosity, what is the mass of a MS star?
 - given the luminosity, what is the absolute magnitude?
 - given the luminosity and temperature, what is the radius of a MS star?
 - given the absolute and apparent magnitude, what is the distance to the star?

| Luminosity: | |
|---------------------|--|
| Mass-Luminosity: | |
| Apparent magnitude: | |
| Absolute magnitude: | |
| Distance modulus: | |

(and, of course, understanding the H-R diagram...)