

# Astronomy 16 Final Questions

1. Why don't stars collapse under their own gravity? (What is hydrostatic equilibrium?)
2. What is pressure? What is an ideal gas? (Can you explain the ideal gas law, and its applications in astronomy?)
3. Why do people who climb tall mountains such as Mt. Everest need to bring oxygen tanks? (What is scale height?)
4. What is the Virial Theorem, and why is it useful to astronomers? What are some applications?
5. How do stars form? Can you give me an example of the immense scales involved in forming a star from a molecular cloud?
6. Why is it incorrect to say that planets orbit stars? What is a more accurate statement?
7. What is a Doppler wobble and how is it used to find planets around other stars? Can you show me what a Doppler signal looks like, and how to read it?
8. How do astronomers use eclipses to find planets around other stars? What is the probability that a planet eclipses its star? Can you show me what a transit signal looks like and how to read it?