

1.a) What does the Boltzmann function describe?

1.b) Plot the Boltzmann function, label the axes in words, and comment on the functional form.

2.a) Give the NAME of the equation you would use to find:

Ratios of EXCITATION states: _____

Ratios of IONIZATION states: _____

2.b) There is an exponential term in each of those two equations.
Write its general form and discuss its meaning.

3) Hertzsprung-Russell diagram: What are the axes theorists like to use for the HR diagram?

Sketch it, label the axes, and indicate the main sequence.

What does the main sequence represent, physically?