

Phys 10 Homework 4 (Due Feb 5)

Assigned: Jan 29

This homework is shorter than the others to allow time for you to study for the midterm. This homework will carry $\frac{1}{2}$ the weight of a normal homework in determining your total homework score.

This material will be covered in class on Thursday and in sections this week.

4.1 At “freeze out”, all available neutrons become bound with protons to form Helium nuclei (which contain 2 neutrons and 2 protons).

After freeze out, what would the proportion be of Hydrogen to Helium if the ratio of protons to neutrons was:

- a) 7/1
- b) 11/1
- c) 23/1

Please give the proportion of H to He by mass, as I will do in the Thursday lecture this week.