

Physics 335—Thermal Physics
Homework Assignment #7
Due October 23, 2024, 11:40 a.m.

Ch 5: Problems 5.24, 5.28, and 5.32 (20 pts. each), and 5.48 (extra credit).

Hints: For Problem 5.32, assume that the pressure p increases with depth z according to the expression $p = p_{\text{atm}} + \rho g z$, where p_{atm} is atmospheric pressure, ρ is the density of the ice, g is the gravitational acceleration, and z is the distance below the surface.

We will not discuss the Van der Waals model in any detail in class, so problem 5.48 will be extra credit.

All problems are worth 20 pts. each.