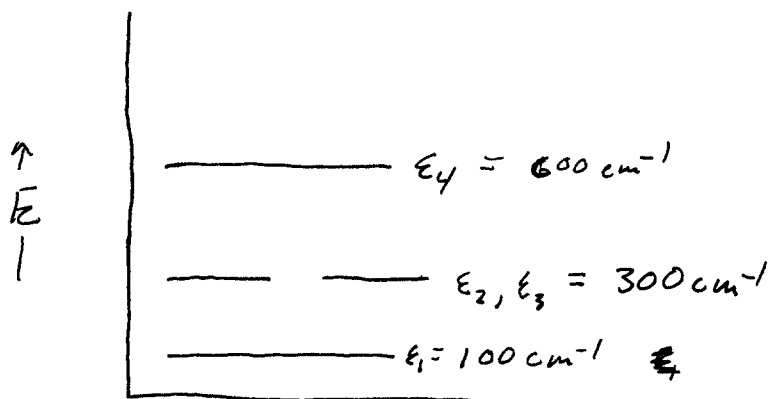


# Practice Quiz

- ① Some crazy system has the following four energy levels



- ② Write out the partition function for this system

- ③ What is the probability of finding a particle in states 1, 2, 3 or 4 at room temp (298K). That is calculate  $P_1, P_2, P_3$  and  $P_4$

- ④ At what temperature does the chance of finding a particle in either state 2 or 3 equal the chance of finding it in the ground state?