1. **For a gas obeying the Maxwell velocity distribution obtain:**
2. **The most probable speed of the particles**
3. **The most probable Kinetic Energy of the particles**
4. **The mean speed of the particles**
5. **The root mean squared speed of the particles the mean kinetic energy of the particles**
6. **For a classical ideal gas at temperature T , calculate the average value of (|P|)^.5 where P is the momentum of a particle.**