

1. Is the wavelength of electrons on different orbits the same or different? If different what is the ratio of the wavelength in first and 4th orbits?
  
2. The Davisson-Germer experiment that first demonstrated the wave nature of matter used electrons accelerated to 54 V. solve the followings?
  - a. Determine the energy of the electrons in joules?
  - b. How fast were the electrons moving in this experiment?
  - c. What momentum did these electrons have?
  - d. Determine the wavelength of these electrons.