

Physics 220 Assignment 2
Due Thursday 1/29/09

To hand in:

1. TZD 3.33
2. TZD 3.39
3. TZD 3.47
4. TZD 4.9
5. TZD 4.18
6. TZD 4.21
7. TZD 4.27; also find the wavelength before and after
8. a) A 150 keV photon Compton scatters from an electron. For what photon scattering angle θ will the recoiling electron have the greatest kinetic energy? Explain briefly.
b) Find the scattered photon's energy in keV for this situation.
c) What is the electron's kinetic energy in this case? What is its momentum (in keV/c)?

Extra credit TZD 4.32