Assigned problems. Two problems will be graded, and will be worth 50 points each.

- 1. Calculate the matrix representations of the spin operators  $\hat{S}_x$ ,  $\hat{S}_y$  and  $\hat{S}_z$  for a spin s = 3/2 particle.
- **2.** Gasiorowicz 14.7
- **3.** Gasiorowicz 14.9
- 4. Gasiorowicz 14.14