1. Operators are commute or not commute : \hat{p}_x and \hat{p}_y ? Give a physical interpretation.

2. Why for infinite potential well the solution for quantum number n=0 must be ignored ? Give a physical justification (relation to Heisenberg uncertainty principle).

3. What does the eigenvalue problem look like for the operator of square of the orbital magnetic moment $\hat{\mu}_l^2$ of an electron in a hydrogen atom? Present the wave function and eigenvalues of this operator.(derive)

PS! http://parsek.yf.ttu.ee/~physics/QM.html