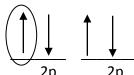
- 1) Which is the first element that can have a electron with the following set of quantum numbers:
 - a) (3, 1,-1, -½)

- b) (6, 0, 0, ½)
- 2) The following deals with the element Selenium:
 - a) Write out the short-hand (noble gas) electron configuration of Selenium.
 - b) Draw the electron box (orbital) diagram of Selenium.

- c) What is the set of quantum numbers that identify of the last electron placed?
- 3) Which of the following sets of quantum numbers represent valid sets? EXPLAIN what is wrong with the ones that are not valid.
 - a) (5, 3, 0,- ½)
 - b) (2, -1, -1, ½)
 - c) (2, 3, -1, -½)
 - d) (6, 2, 0, 1)
- 4) Given the following electron box diagram, write the set of quantum numbers for each electron that is marked.

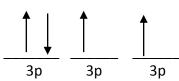












Circled = _____

Boxed : _____

Last one placed: