Quantum numbers:

Give the number of electrons described by the quantum numbers below:

1. n=2; l=0
2. n=4
3. n= 3; l=2
4. n=1; l=0; ml= 0
5. n=3; l=2; ml= -1; ms= +1/2

Is the following set of quantum numbers valid or not?

1. n=3; l=0; ml = 1; ms = -1/2
2. n=1; l=0; ml=0, ms = +1/2
3. n= 4 l= 3; ml= 2; ms= +1/2