

QUANTUM NUMBERS - EXERCISES

1. Determine if the following quantum numbers correspond to an orbital or if they are not correct. Specify the orbital represented in each correct case.

- a) (2, -1, 1)
- b) (2, 1, -1)
- c) (1, 1, 0)
- d) (3, 1, 2)

2. Determine if the following quantum numbers correspond to an orbital or if they are not correct. Specify the orbital represented in each correct case.

- a) (1, 0, 1)
- b) (2, 0, 0)
- c) (2, 2, -1)
- d) (3, 1, -1)

3. Are the following quantum number combinations allowed? Explain the reasons

- a) (2, 0, -1)
- b) (4, 3, -1)
- c) (3, 1, 0)
- d) (5, 2, 3)