

# Allowed or Not Allowed?

Write the orbital for the following quantum numbers and then select allowed or not allowed.

Quantum numbers	Orbitals	Allowed or Not Allowed	
(2, 0, 0, +1/2)	2s	Allowed	Not Allowed
(3, 3, 1, +1/2)		Allowed	Not Allowed
(5, 2, -2, +1/2)		Allowed	Not Allowed
(1, 1, 0, +1/2)		Allowed	Not Allowed
(2, 1, 0, -1/2)		Allowed	Not Allowed
(4, 3, 0, -1/2)		Allowed	Not Allowed
(4, 2, 2, +1/2)		Allowed	Not Allowed
(2, 2, -1, -1/2)		Allowed	Not Allowed
(1, 0, 0, -1/2)		Allowed	Not Allowed
(3, 2, 1, +1/2)		Allowed	Not Allowed
(2, 3, 3, +1/2)		Allowed	Not Allowed
(3, 2, 2, -1/2)		Allowed	Not Allowed
(2, 2, 0, +1/2)		Allowed	Not Allowed
(5, 0, 0, -1/2)		Allowed	Not Allowed
(4, 1, -1, +1/2)		Allowed	Not Allowed

Select which of the following quantum numbers is allowed.

(2, 0, -1, -1/2)

(1, -1, 0, +1/2)

(2, 1, 0, +1/2)

(4, 1, -1, -1)

(3, 2, -1, -1/2)

(4, -1, 0, +1/2)

(3, 2, -3, +1/2)

(3, 2, 2, +2)

(3, 3, 2, +1/2)