

If we have $4s^2$ the last electron have

then Principal quantum no is $n=4$

Azimuthal quantum no. is $(l) = 0$ to $(n-1)$

$$0 = 0$$

Magnetic quantum no. $(m) = 0$

Spin quantum $\boxed{\uparrow\downarrow} = \frac{1}{2}$

So Spin quantum no. $= -\frac{1}{2}$

If we have $4p^2$ then all quantum no. of last electron are as

Principal quantum no. $(n) = 4$ because
 $4p^2$ show the 4th shell.

Azimuthal quantum no. $(l) = 1$ because

It shows the subshell shape and

the value of (l) for s-subshell - 0

p-subshell - 1

d-subshell - 2

So, the Azimuthal quantum no is 1

Magnetic quantum no $(m) = 0$ because

in $4p^2$ $\begin{array}{|c|c|c|} \hline \uparrow & 0 & \uparrow \\ \hline 1 & 1 & \\ \hline \end{array}$ $m = -1$ to $+1$

Here (l) is 1 so, value should be $-1, 0, +1$ but the last electron of $4p^2$ have $(\ominus)$.

Spin quantum no. $\boxed{\uparrow\downarrow} = \frac{1}{2}$