

Which of the following statements is false for the following rxn ?



→ x2 ↑ multiply entire rxn by 2 + also the ΔH



reverse entire rxn + change sign of ΔH



multiply entire rxn by 3 + also the ΔH



divided rxn by 2 but did not divide ΔH by 2

For the given reaction, choose the correct equation either [(a) or (b)]



reverse rxn 1
multiply rxn 2 by 3
multiply rxn 3 by 4



(* is my symbol for multiply) → this is

$n \sum \Delta H_f^\circ \text{ reactant} - n \sum \Delta H_f^\circ \text{ product} \rightarrow$ actual equation is

$(n \sum \Delta H_f^\circ \text{ product} - n \sum \Delta H_f^\circ \text{ reactant})$

Choose the best statement.

- For $n=4$ (shell, period # in periodic table), l (subshell) can equal 0, 1, 2, 3 (where 3 is $n-1$)
- For $l=2$ (d subshell), m_l (orbital) equals -2, -1, 0, +1, +2 (d subshell has 5 orbitals)
- m_s can equal $+1/2$ or $-1/2$ & is the spin quantum number. (Each orbital can hold 2 electrons with different spin numbers.)
- For l (orbitals) 0 is s, 1 is p, 2 is d, 3 is f

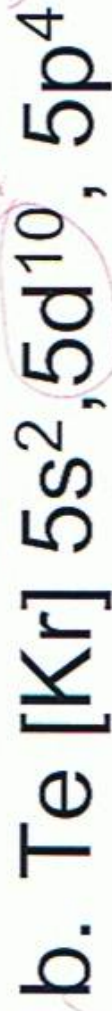
e. All statements are correct.

Best Statement
 $n = \text{Principal Quantum \#}$
 $l = \text{Angular Quantum \#}$
 $m_l = \text{Magnetic Quantum \#}$
 $m_s = \text{Spin Quantum \#}$

Choose the one incorrect electron configuration or statement.



- Valence e

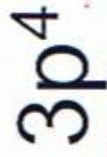


d orbitals are always $n-1$ ($5-1=4$) should be $4d^{10}$



Valence e

e. Valence electrons for S is $3s^2,$



→ Te



Valence e is $5s^2, 5p^4$