

FINAC

① n - Principal Energy Level

l Sublevel

s	p	d	f
0	1	2*	3

m Orbital

S Spin $+\frac{1}{2}$ or $-\frac{1}{2}$

-2 -1 0 1 2

Jan 15-8:07 AM

② $D = \frac{M}{V} = \frac{15.442}{2.10} = 7.353$

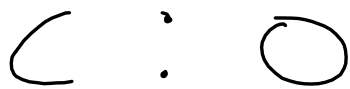
3 sf

⑤ sf

15.442g

③ 51.8 cm³ - ③ 44.7 cm³

Jan 15-8:19 AM

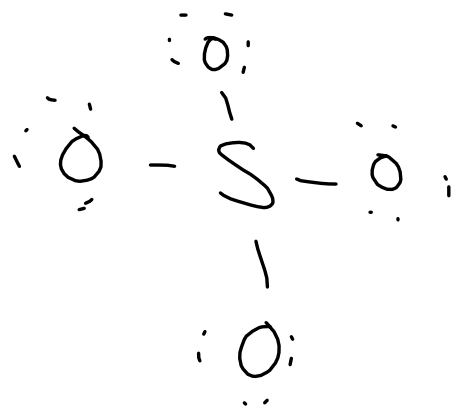


Jan 15-8:22 AM



$$6 + 4(6) + 2 = 32 - 8 = 24$$

$$\begin{array}{r} -24 \\ \hline \end{array}$$



Jan 15-8:28 AM

⑥ $2\text{H}_2 + \overset{\text{LS}}{\text{O}_2} \rightarrow 2\text{H}_2\text{O}$

$50 - 6.25 = \boxed{43.75 \text{ g left over}}$ used up!

50g H ₂	1 mole H ₂	2 mole H ₂ O	18g H ₂ O	= 4(50g H ₂)
2g H₂	2 mole H₂	2 mole H₂O	1 mole H ₂ O	

50g O ₂	1 mole O ₂	2 mole H ₂ O	18g H ₂ O	= 56.25g H ₂ O
32g O₂	1 mole O ₂	1 mole H₂O	1 mole H ₂ O	

50g O ₂	1 mole O ₂	2 mole H ₂	2g H ₂	= $\boxed{\frac{6.25 \text{ g H}_2}{\text{Used}}}$
32g O₂	1 mole O ₂	1 mole H₂	1 mole H ₂	

Jan 15-8:30 AM

⑩ $\text{N}_2 + \overset{1}{\text{O}_2} \rightarrow \text{2NO}_2$ 66.4 kJ

~~2NO₂~~ $\rightarrow 2\text{NO} + \text{O}_2$ + 114.2 kJ

$\text{N}_2 + \text{O}_2 \rightarrow 2\text{NO}$

Jan 15-8:44 AM