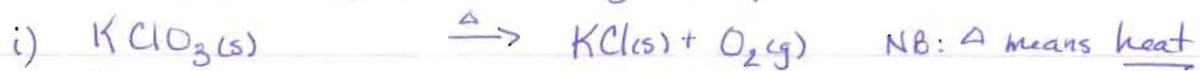
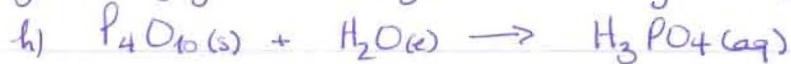
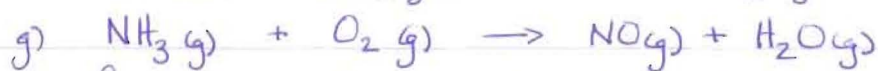
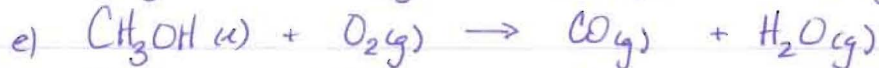
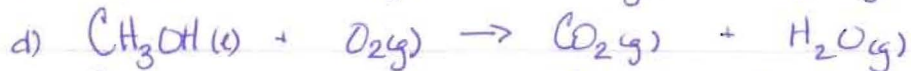
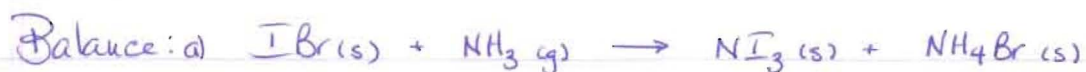


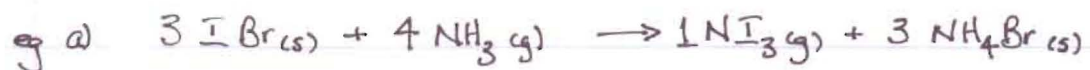
CHEM - Extra Practice Balancing Equations



How to verify that an equation is balanced:

* Check the mass on each side - they will be equal if you're balanced

N.B. Approximate (rounded) masses are fine... in this case you're just comparing.



$$\text{reagents: } 3 [\text{NH}_3 + \text{NH}_4\text{Br}] + 4 [\text{NH}_3 + 3\text{NH}_4\text{H}]$$

$$= 3 [126.9 + 79.9] + 4 [14 + 3(1)]$$

$$= 3 [206.8] + 4 [17] = 688.4$$

total mass on reagent side

$$\text{products: } 1 [14 + 3(126.9)] + 3 [14 + 4(1) + 79.9]$$

$$= 1 [394.7] + 3 [97.9] = 688.4$$

total mass on products side.

* You can now check the rest for yourselves.