

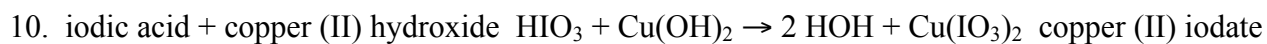
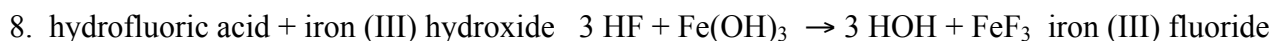
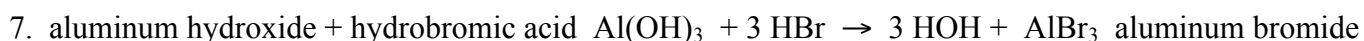
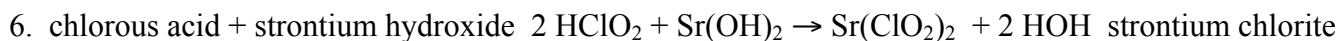
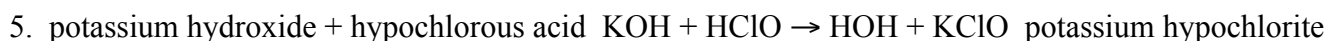
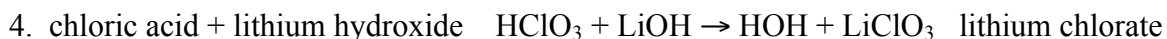
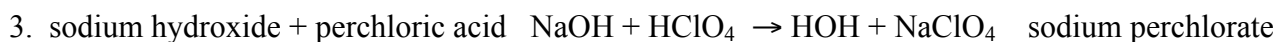
Predict and balance each reaction. Write the name of each salt produced.

1. sulfuric acid + potassium hydroxide $\text{H}_2\text{SO}_4 + 2 \text{KOH} \rightarrow 2 \text{HOH} + \text{K}_2\text{SO}_4$ potassium sulfate
2. phosphoric acid + sodium hydroxide $\text{H}_3\text{PO}_4 + \text{NaOH} \rightarrow 3 \text{HOH} + \text{Na}_3\text{PO}_4$ sodium phosphate
3. nitric acid + magnesium hydroxide $2 \text{HNO}_3 + \text{Mg}(\text{OH})_2 \rightarrow 2 \text{HOH} + \text{Mg}(\text{NO}_3)_2$ magnesium nitrate
4. chloric acid + calcium hydroxide $2 \text{HClO}_3 + \text{Ca}(\text{OH})_2 \rightarrow 2 \text{HOH} + \text{Ca}(\text{ClO}_3)_2$ calcium chlorate
5. hydrochloric acid + lithium hydroxide $\text{HCl} + \text{LiOH} \rightarrow \text{HOH} + \text{LiCl}$ lithium chloride
6. carbonic acid + barium hydroxide $\text{H}_2\text{CO}_3 + \text{Ba}(\text{OH})_2 \rightarrow 2 \text{HOH} + \text{BaCO}_3$ barium carbonate
7. phosphorous acid + ammonium hydroxide $\text{H}_3\text{PO}_3 + 3 \text{NH}_4\text{OH} \rightarrow 3 \text{HOH} + (\text{NH}_4)_3\text{PO}_3$
ammonium phosphite
8. sulfurous acid + potassium hydroxide $\text{H}_2\text{SO}_3 + \text{KOH} \rightarrow 2 \text{HOH} + \text{K}_2\text{SO}_3$ potassium sulfite
9. perchloric acid + iron (III) hydroxide $3 \text{HClO}_4 + \text{Fe}(\text{OH})_3 \rightarrow 3 \text{HOH} + \text{Fe}(\text{ClO}_4)_3$
iron (III) perchlorate
10. acetic acid + aluminum hydroxide $3 \text{HC}_2\text{H}_3\text{O}_2 + \text{Al}(\text{OH})_3 \rightarrow 3 \text{HOH} + \text{Al}(\text{C}_2\text{H}_3\text{O}_2)_3$
aluminum acetate

Predict and balance each reaction. Write the name of each acid, base and salt.

1. $\text{HBr} + \text{LiOH} \rightarrow \text{HOH} + \text{LiBr}$ hydrobromic acid, lithium hydroxide, lithium bromide
2. $2 \text{HClO}_2 + \text{Ca(OH)}_2 \rightarrow 2 \text{HOH} + \text{Ca(ClO}_2)_2$ chlorous acid, calcium hydroxide, calcium chlorite
3. $\text{H}_2\text{SO}_4 + 2 \text{NH}_4\text{OH} \rightarrow 2\text{HOH} + (\text{NH}_4)_2\text{SO}_4$ sulfuric acid, ammonium hydroxide, ammonium sulfate
4. $\text{H}_3\text{PO}_4 + 3 \text{NaOH} \rightarrow 3 \text{HOH} + \text{Na}_3\text{PO}_4$ phosphoric acid, sodium hydroxide, sodium phosphate
5. $3 \text{H}_2\text{CO}_3 + 2 \text{Al(OH)}_3 \rightarrow 6 \text{HOH} + \text{Al}_2(\text{CO}_3)_3$ carbonic acid, aluminum hydroxide,
aluminum carbonate
6. $\text{HCl} + \text{KOH} \rightarrow \text{HOH} + \text{KCl}$ hydrochloric acid, potassium hydroxide, potassium chloride
7. $3 \text{HNO}_3 + \text{Fe(OH)}_3 \rightarrow 3 \text{HOH} + \text{Fe(NO}_3)_3$ nitric acid, iron (III) hydroxide, iron (III) nitrate
8. $2 \text{HI} + \text{Ca(OH)}_2 \rightarrow 2 \text{HOH} + \text{CaI}_2$ hydroiodic acid, calcium hydroxide, calcium iodide
9. $\text{HBr} + \text{NH}_4\text{OH} \rightarrow \text{HOH} + \text{NH}_4 \text{Br}$ hydrobromic acid, ammonium hydroxide, ammonium bromide
10. $2 \text{HF} + \text{Mg(OH)}_2 \rightarrow 2 \text{HOH} + \text{MgF}_2$ hydrofluoric acid, magnesium hydroxide, magnesium fluoride

Predict and balance each reaction. Write the name of each salt produced.



Predict and balance each reaction. Write the name of each acid, base and salt.

1. $\text{CuOH} + \text{HNO}_2 \rightarrow \text{HOH} + \text{CuNO}_2$ copper (I) hydroxide, nitrous acid, copper (I) nitrite
2. $2 \text{HNO}_3 + \text{Zn(OH)}_2 \rightarrow 2 \text{HOH} + \text{Zn(NO}_3)_2$ nitric acid, zinc hydroxide, zinc nitrate
3. $\text{Ba(OH)}_2 + \text{H}_2\text{C}_2\text{O}_4 \rightarrow 2 \text{HOH} + \text{BaC}_2\text{O}_4$ barium hydroxide, oxalic acid, barium oxalate
4. $\text{H}_3\text{PO}_4 + \text{Sr(OH)}_2 \rightarrow 6 \text{HOH} + \text{Sr}_3(\text{PO}_4)_2$ phosphoric acid, strontium hydroxide, strontium phosphate
5. $3 \text{CsOH} + \text{H}_3\text{PO}_3 \rightarrow 3 \text{HOH} + \text{Cs}_3\text{PO}_3$ cesium hydroxide, phosphorous acid, cesium phosphite
6. $\text{H}_2\text{SO}_4 + \text{Mn(OH)}_2 \rightarrow 2 \text{HOH} + \text{MnSO}_4$ sulfuric acid, manganese (II) hydroxide, manganese (II) sulfate
7. $\text{Ra(OH)}_2 + 2 \text{HCl} \rightarrow 2 \text{HOH} + \text{RaCl}$ radium hydroxide, hydrochloric acid, radium chloride
8. $3 \text{H}_2\text{CO}_3 + 2 \text{Co(OH)}_3 \rightarrow 6 \text{HOH} + \text{Co}_2(\text{CO}_3)_3$ carbonic acid, cobalt (III) hydroxide, cobalt (III) carbonate
9. $\text{Pd(OH)}_2 + 2 \text{HBr} \rightarrow 2 \text{HOH} + \text{PdBr}_2$ palladium (II) hydroxide, hydrobromic acid, palladium (II) bromide
10. $4 \text{HC}_2\text{H}_3\text{O}_2 + \text{Pd(OH)}_4 \rightarrow 4 \text{HOH} + \text{Pd(C}_2\text{H}_3\text{O}_2)_4$ acetic acid, palladium (IV) hydroxide,
palladium (IV) acetate