ACID + BASE -> SALT + WATER

Examples - complete and balance the following neutralization reactions

1. ___HCl + ___Mg(OH)₂
$$\rightarrow$$

3. ___HNO₃ + ___Ca(OH)₂
$$\rightarrow$$

- an acid can be neutralized by a carbonate, products include $CO_{2(g)}$
- this is stomach acid and Alka Seltzer, why does it makes you burp
- similarly a carbonate can be dissolved by an acid (marble statues dissolved by acid rain, egg shell in vinegar)

Write balanced equations for these neutralization reactions:

5. hydrochloric acid (hydrogen chloride) and sodium hydroxide

6. sulfuric acid (hydrogen sulfate) and potassium hydroxide

^{*}special reaction