Balance each of the following chemical reactions, and state *which type of reaction* is occurring.

1. S_8 + F_2 → SF_6

2. $Mg(OH)_2$ + $CrPO_4$ → $Mg_3(PO_4)_2$ + $Cr(OH)_3$

3. HNO_3 + Mn → $Mn(NO_3)_3$ + H_2

4. C_6H_{14} + O_2 → CO_2 + H_2O

5. $C_5H_{11}OH$ → C + H_2 + O_2

6. Al + $Sn(SO_4)_2$ → $Al_2(SO_4)_3$ + Sn

7. C_2H_5OH → C + H_2 + O_2

8. aluminum hydroxide + sulfuric acid → aluminum sulfate + water

9. K_3PO_4 + MgS →

10. C_7H_{16} + O_2 →