Classifying Reactions

Classify each reaction as synthesis, combustion, decomposition, single displacement, or double displacement.

$$Mg + Fe_2O_3 \rightarrow Fe + MgO$$

$$C_2H_4 + O_2 \rightarrow CO_2 + H_2O$$

$$NH_3 + I_2 \rightarrow N_2I_6 + H_2$$

$$C + H_2 \rightarrow CH_4$$

$$Pb + O_2 --> PbO_2$$

$$CuCl_2 + H_2S \rightarrow CuS + HCl$$

$$P \ + \ O_2 \ \rightarrow \ P_4O_{10}$$

$$Al_2O_3 \rightarrow Al + O_2$$

$$HgO \rightarrow Hg + O_2$$

$$S_8 + F_2 \rightarrow SF_6$$

$$O_2 + C_3H_8 \rightarrow H_2O + CO_2$$