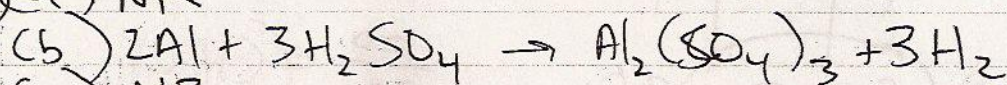


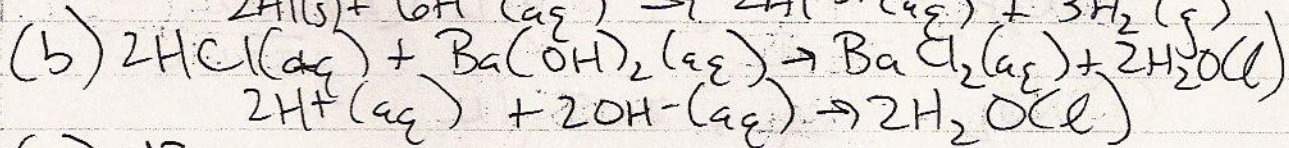
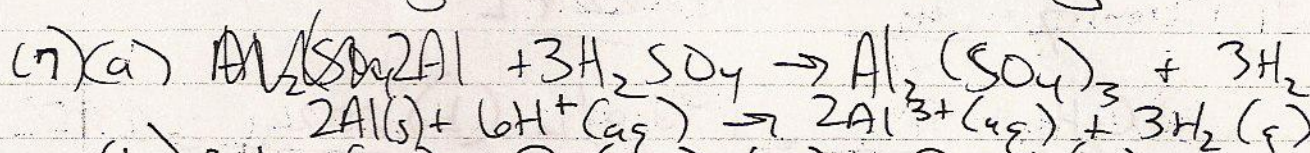
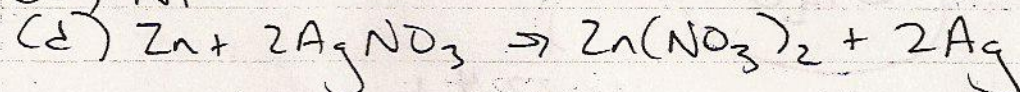
(4) (a) decomposition (d) single replacement
 (b) decomposition (e) combustion
 (c) double replacement (f) combination

(5) Decomposition reactions have only one reactant.
 Combustion reactions always feature oxygen gas (O_2) as a reactant.

(6) (a) NR



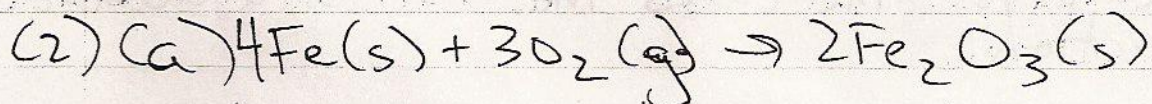
(c) NR



(c) NR

(8) Ch. 9

(1) Mass + number of atoms are always conserved in a chemical reaction.



(b) $\frac{16.7 \text{ g Fe}}{55.8 \text{ g}} \times \frac{1 \text{ mol}}{1 \text{ mol}} \times \frac{2 \text{ mol Fe}_2\text{O}_3}{4 \text{ mol Fe}} \times \frac{159.6 \text{ g}}{1 \text{ mol}} = 23.9 \text{ g Fe}_2\text{O}_3$