"TRY YOURSELF" PROBLEMS FROM STUDY SECTION 3.7 TO 3.9

Try Yourself 3.8

Assign an oxidation number to the underlined atom in each of the following molecules or ions.

- a) $\underline{Fe_2}O_3$ b) $\underline{H_2}\underline{S}O_4$ c) $\underline{C}O_3^{2-}$

Try Yourself 3.9

For the reaction of the iron(II) ion with permanganate ion in aqueous acid,

$$5Fe^{2+}(aq) + MnO_4^-(aq) + 8H_3O^+(aq) \to 5Fe^{3+}(aq) + Mn^{2+}(aq) + 12H_2O(l)$$

Decide which atoms are undergoing a change in oxidation number and identify the oxidizing and reducing agents.