Balancing equations worksheet / identifying redox reactions

1	N_2	+	3	H_2	$\longrightarrow$	2	NH_3			
2	NO	+	1	O_2	$\longrightarrow$	2	NO_2			
1	Cu	+	2	$AgNO_3$	$\longrightarrow$	1	$Cu(NO_3)_2$	+	2	Ag
1	$C_{12}H_{22}O_{11}$	+	12	O_2	$\longrightarrow$	12	CO_2	+	11	H_2O
2	In	+	3	S	$\longrightarrow$	1	In_2S_3			
			2	NOCl	$\longrightarrow$	2	NO	+	1	Cl_2
1	MnO_2	+	4	HCl	$\longrightarrow$	2	H_2O	+	1	$MnCl_2$ + 1 Cl_2
2	$AlPO_4$	+	3	$CaCl_2$	$\longrightarrow$	1	$Ca_3(PO_4)_2$	+	2	$AlCl_3$
			2	$NaNO_3$	$\longrightarrow$	2	$NaNO_2$	+	1	O_2
2	$Fe(OH)_3$	+	3	H_2SO_4	$\longrightarrow$	1	$Fe_2(SO_4)_3$	+	6	H_2O
1	$Hg_2(NO_3)_2$	+	2	NaCl	$\longrightarrow$	1	Hg_2Cl_2	+	2	$NaNO_3$
2	ZnS	+	3	O_2	$\longrightarrow$	2	ZnO	+	2	SO_2

Some of the above are redox reactions. Which fit this description?

In those, identify which species is being oxidized, and which is being reduced.

In some cases the redox answers require that you see the individual ions involved in the reaction. For example, in eqn. 7, MnO_2 involves Mn^{4+}, while $MnCl_2$ involves Mn^{2+}. Likewise, Cl is winning the tug for shared electrons in HCl, but is neutral in Cl_2 (i.e. less negative, or more positive, in the product). In #6, while N is a tad more electronegative than Cl, it is in a tug of war with both O and Cl, so I look at the reaction as relief for N. I would accept Cl being reduced, N being oxidized as an answer also.

reaction	redox?	oxidized	reduced
1	y	H_2	N_2
2	y	NO	O_2
3	y	Cu	Ag^+
4	y	$C_{12}H_{22}O_{11}$	O_2
5	y	In	S
6	y	Cl	N
7	y	Cl^-	Mn^{4+}
8	n		
9	y	O in NO_3^-	N in NO_3^-
10	n		
11	n		
12	y	S^{2-}	O_2