Oxidation Number Practice Problems - Key

Note: Before you start this exercise read the handout "Oxidation States and Rules for Assigning Them".

1) find the oxidation number for each atom of the following compounds/ions. Place the name of each compound/ion on the space provided:

Potassium Phosphate	Sulfur trioxide	Calcium nitrate	Sulfur dioxide
K_3PO_4	SO_3	$Ca(NO_3)_2$	SO_2
K +1	S +6	Ca +2	S +4
P +5	O −2	N +5	O −2
O −2		O −2	

Perchlorate	Carbon monoxide	dinitrogen tetroxide	~~dichromate~~ Oxalate
ClO_4^-	CO	N_2O_4	$C_2O_4^{2-}$
Cl +7	C +2	N +4	C +3
O −2	O −2	O −2	O −2

Lithium hypoiodite	Carbonate	Sodium Sulfite	dichromate
LiIO	CO_3^{2-}	Na_2SO_3	$Cr_2O_7^{2-}$
Li +1	C +4	Na +1	Cr +6
I +1	O −2	O −2	O −2
O −2		S +4	

Potassium hydrogen ~~sulfate~~	Potassium permanganate	~~chromium~~ Chromium(III) oxide	tetraphosphorus decoxide
$KHSO_4$	$KMnO_4$	Cr_2O_3	P_4O_{10}
K +1	K +1	Cr ~~+6~~ +3	P +5
H +1	Mn +7	O −2	O −2
S +6	O −2		
O −2			