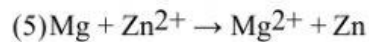
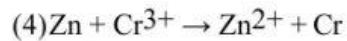
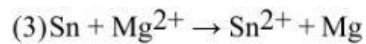
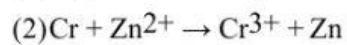
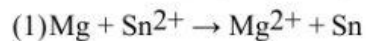


Kerjakan Soal berikut

1. Diketahui data potensial elektroda sebagai berikut:

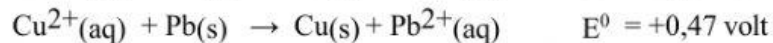
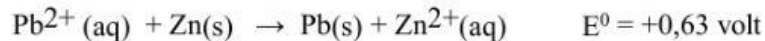
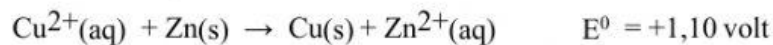


Periksalah reaksi-reaksi berikut ini apakah dapat berlangsung spontan dan tentukanlah reaksi manakah yang menghasilkan harga potensial terbesar?



Reaksi yang memiliki harga potensial terbesar adalah

2. Diketahui potensial reduksi standar untuk reaksi sel berikut:



Berdasarkan harga-harga potensial sel di atas, tuliskan urutan urutan ketiga logam di atas dalam deret volta dari pereduksi paling kuat.

1.	
2.	
3.	

3. Diketahui potensial standar beberapa sel sebagai berikut :

Setengah reaksi	E° (volt)
$\text{Ba}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Ba}(\text{s})$	-2,90
$\text{Sr}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Sr}(\text{aq})$	-2,89
$\text{Ca}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Ca}(\text{s})$	-2,76
$\text{Na}^+(\text{aq}) + e^- \rightarrow \text{Na}(\text{s})$	-2,71
$\text{Mg}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Mg}(\text{s})$	-2,375
$\text{Al}^{3+}(\text{aq}) + 3e^- \rightarrow \text{Al}(\text{s})$	-1,706
$\text{Ti}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Ti}(\text{s})$	-1,63
$\text{Mn}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Mn}(\text{s})$	-1,029
$\text{Cr}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Cr}(\text{s})$	-0,91
$2\text{H}_2\text{O}(\text{l}) + 2e^- \rightarrow \text{H}_2(\text{g}) + 2\text{OH}^-(\text{aq})$	-0,83
$\text{Zn}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Zn}(\text{s})$	-0,76
$\text{Cr}^{3+}(\text{aq}) + 3e^- \rightarrow \text{Cr}(\text{s})$	-0,74
$\text{Cr}^{3+}(\text{aq}) + e^- \rightarrow \text{Cr}^{2+}(\text{aq})$	-0,41
$\text{Fe}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Fe}(\text{s})$	-0,409
$\text{Cd}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Cd}(\text{s})$	-0,403
$\text{Co}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Co}(\text{s})$	-0,28
$\text{Ni}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Ni}(\text{s})$	-0,23
$\text{Sn}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Sn}(\text{s})$	-0,136

Setengah reaksi	E° (volt)
$\text{Li}^+(\text{aq}) + e^- \rightarrow \text{Li}(\text{s})$	-3,045
$\text{K}^+(\text{aq}) + e^- \rightarrow \text{K}(\text{s})$	-2,924
$\text{Cu}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Cu}(\text{s})$	+0,34
$\text{I}_2(\text{s}) + 2e^- \rightarrow 2\text{I}^-(\text{aq})$	+0,535
$\text{Ag}^+(\text{aq}) + e^- \rightarrow \text{Ag}(\text{s})$	+0,799
$\text{Br}_2(\text{aq}) + 2e^- \rightarrow 2\text{Br}^-(\text{aq})$	+1,087
$\text{Pt}^{2+}(\text{aq}) + 2e^- \rightarrow \text{Pt}(\text{s})$	+1,2
$\text{O}_2(\text{g}) + 4\text{H}^+(\text{aq}) + 4e^- \rightarrow 2\text{H}_2\text{O}(\text{l})$	+1,23
$\text{Cl}_2(\text{g}) + 2e^- \rightarrow 2\text{Cl}^-(\text{aq})$	+1,34
$\text{Au}^+(\text{aq}) + e^- \rightarrow \text{Au}(\text{s})$	+1,68
$\text{F}_2(\text{g}) + 2e^- \rightarrow 2\text{F}^-(\text{aq})$	+2,87

Tentukan potensial standar sel berikut

