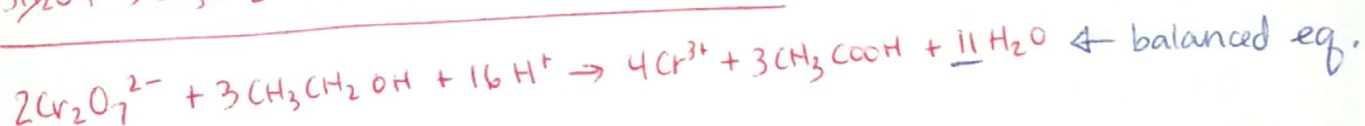
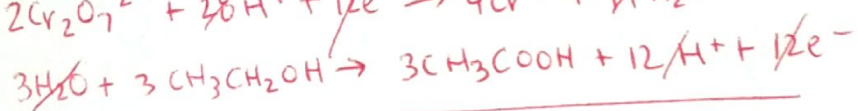
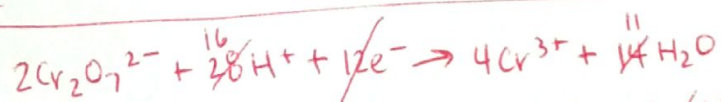
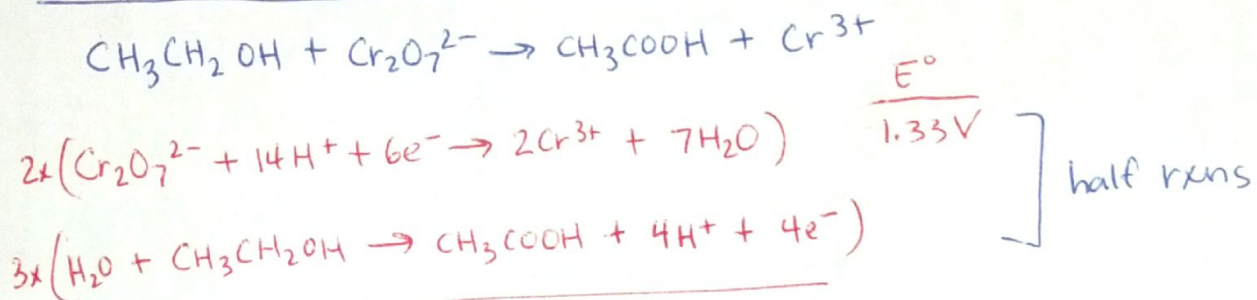
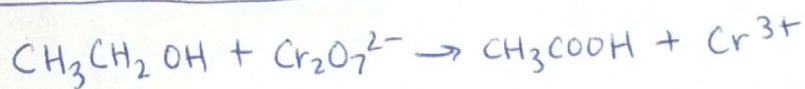


Ch.18 - AP_MC Review Qxns

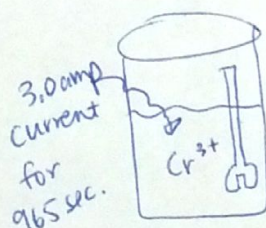
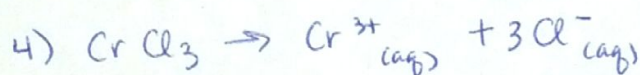
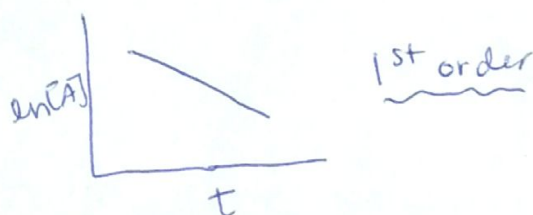


1) (B)

2) (A)

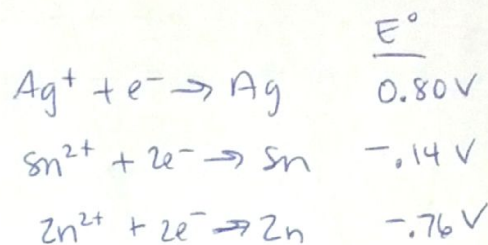
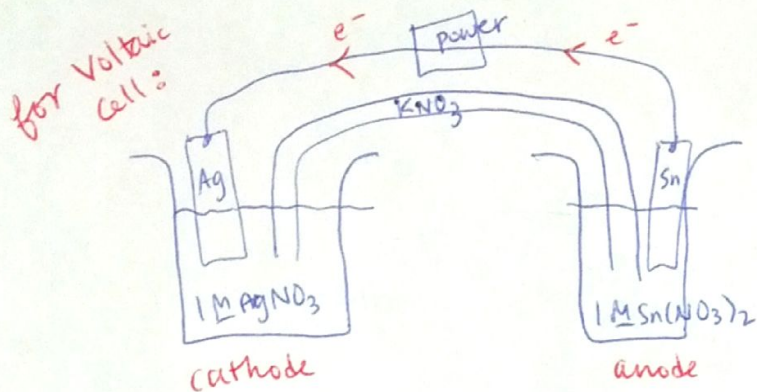


3) (B)



$$965\text{s} \times \frac{3.0\text{ coulomb}}{\text{s}} \times \frac{1\text{mol}^-}{96485\text{ coul.}} \times \frac{1\text{mol Cr}}{3\text{mol e}^-} = 0.010\text{ mol}$$

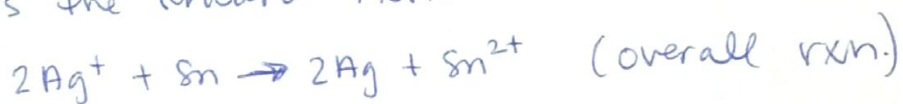
(C)



5) $E^\circ_{\text{cell}} = E^\circ(\text{cathode}) - E^\circ(\text{anode})$
 $= 0.80 \text{ V} - (-0.14 \text{ V}) = 0.94 \text{ V}$ (B) for voltaic cell.

6) (D) Add 1.5 g of $\text{AgNO}_3(\text{s})$ to left beaker

- more Ag^+ ions in solution
- drives the forward rxn.

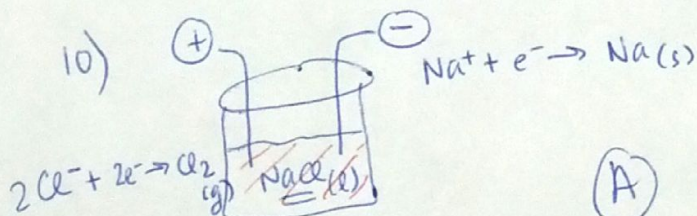


7) (D) K^+ ions travel to the cathode; nitrate (NO_3^-) travel to anode
 (to balance ~~the~~ (-) neg. charge build-up) (to balance (+) charge build-up)
 from NO_3^- from Sn^{2+}

8) (C) Apply an electrical potential greater than E°_{cell} for the forward rxn.

9) (A) Voltage would increase

$$E^\circ_{\text{cell}} = 0.80 \text{ V} - (-0.76 \text{ V}) = 1.56 \text{ V}$$



(A) ΔG is positive
 because electricity is required
 (nonspontaneous rxn.)