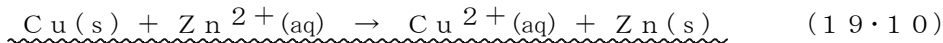
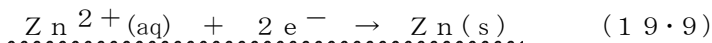
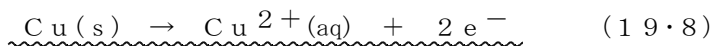
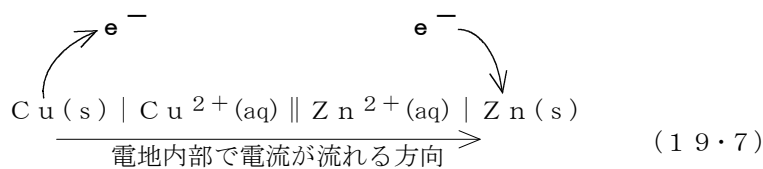
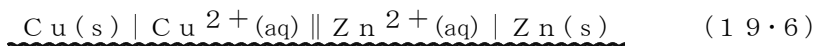
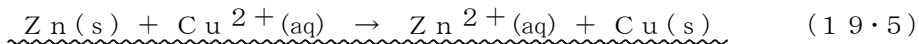
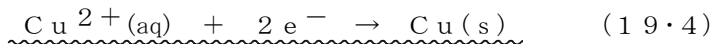
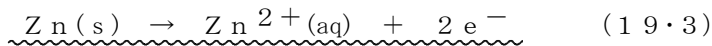
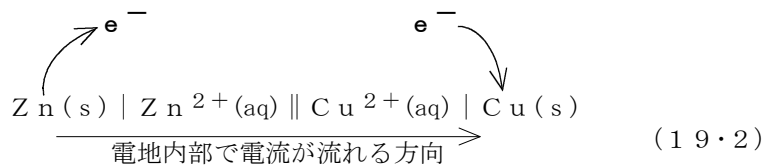
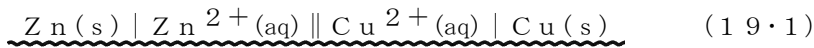


# × | × 電池と電極

## 【電池と反応】

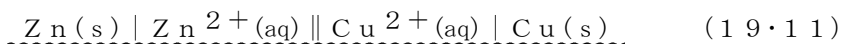
[ダニエル電池]



[問 19・1] つぎの電池記号のそれぞれの電極での反応と電池全体の反応を示せ。

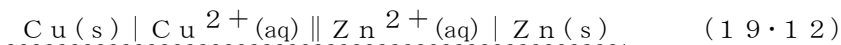
- (a)  $\text{Mg}(s) | \text{Mg}^{2+}(\text{aq}) || \text{Cd}^{2+}(\text{aq}) | \text{Cd}(s)$
- (b)  $\text{Cd}(s) | \text{Cd}^{2+}(\text{aq}) || \text{Mg}^{2+}(\text{aq}) | \text{Mg}(s)$
- (c)  $\text{Ni}(s) | \text{Ni}^{2+}(\text{aq}) || \text{Ag}^+(\text{aq}) | \text{Ag}(s)$
- (d)  $\text{Ag}(s) | \text{Ag}^+(\text{aq}) || \text{Fe}^{3+}(\text{aq}) | \text{Fe}(s)$
- (e)  $\text{Pb}(s) | \text{Pb}^{2+}(\text{aq}) || \text{Al}^{3+}(\text{aq}) | \text{Al}(s)$

## 【アノードとカソード，正極と負極】



Zn 極 : アノード (陽極) , 負極

Cu 極 : カソード (陰極) , 正極

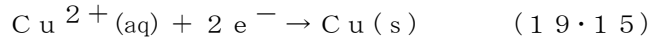
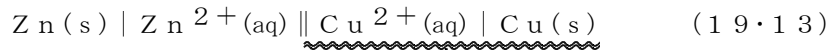


Cu 極 : アノード (陽極) , 正極

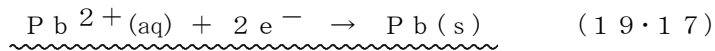
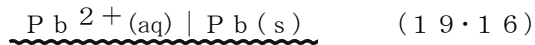
Zn 極 : カソード (陰極) , 負極

【電極と電極反応】

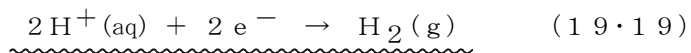
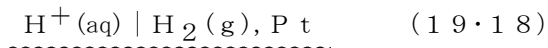
[電極 (半電池)]



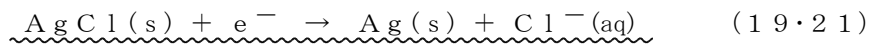
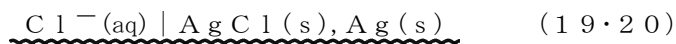
[金属電極]



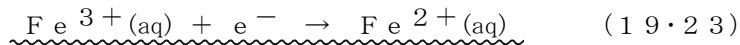
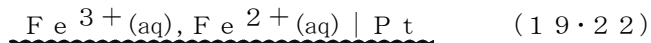
[気体電極]



[第二種電極]



[酸化還元電極]



[問 19・2] つぎの電極の反応を書け。

- (a)  $\text{Ag}^{+}(\text{aq}) \mid \text{Ag(s)}$
- (b)  $\text{Cl}^{-}(\text{aq}) \mid \text{Cl}_2(\text{g}), \text{Pt}$
- (c)  $\text{Cl}^{-}(\text{aq}) \mid \text{Hg}_2\text{Cl}_2(\text{s}), \text{Hg(l)}$
- (d)  $\text{MnO}_4^{-}(\text{aq}), \text{Mn}^{2+}(\text{aq})$  (酸性溶液)  $\mid \text{Pt}$
- (e)  $\text{SO}_4^{2-}(\text{aq}) \mid \text{PbSO}_4(\text{s}), \text{Pb(s)}$