

# TRANSITION METALS

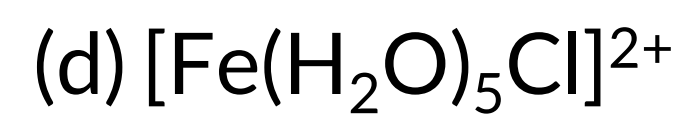
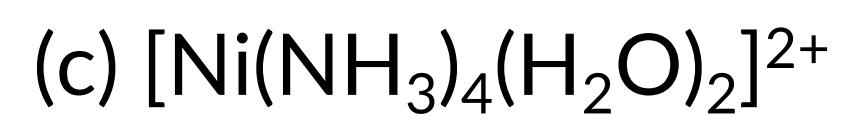
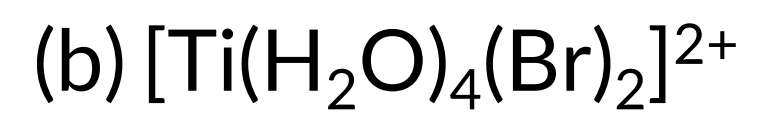
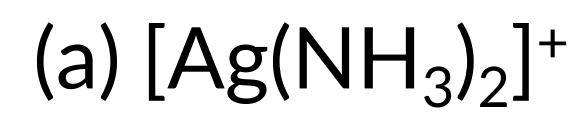
NOMENCLATURE: NAMING TRANSITION METAL COMPLEXES

CHEMISTRY 165 // SPRING 2020

# PRACTICE PROBLEM 1

Name the following cationic complex ions.

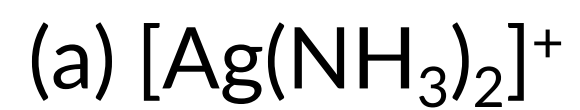
— *answer* —



# PRACTICE PROBLEM 1

Name the following cationic complex ions.

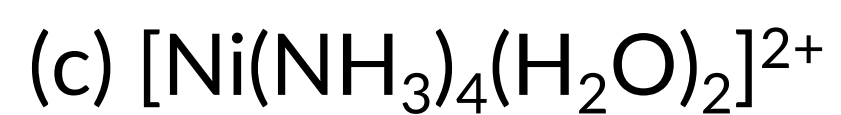
— *answer* —



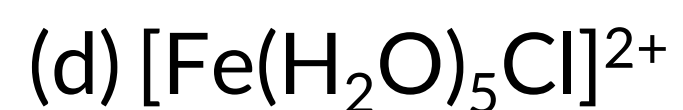
Diamminesilver(I)



Tetraaquadibromotitanium(IV)



Tetraamminediaquanickel(II)

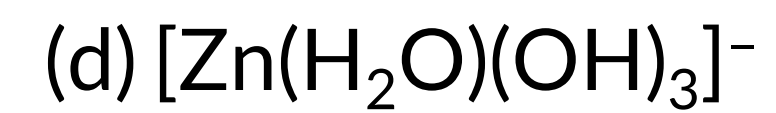
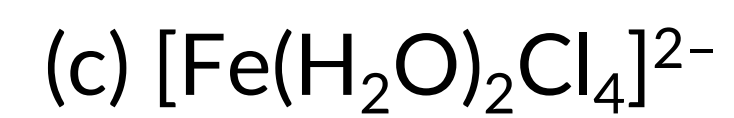


Pentaaquachloroiron(III)

## PRACTICE PROBLEM 2

Name the following anionic complex ions.

— *answer* —



## PRACTICE PROBLEM 2

Name the following anionic complex ions.

— *answer* —

(a)  $[\text{CoI}_4]^{2-}$                       Tetraiodocobaltate(II)

(b)  $[\text{Ni}(\text{CN})_5]^{3-}$                       Pentacyanonickelate(II)

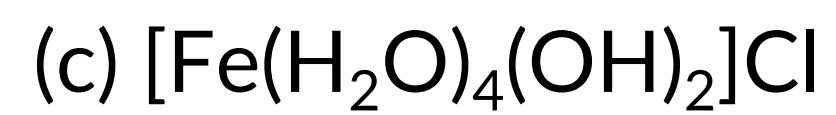
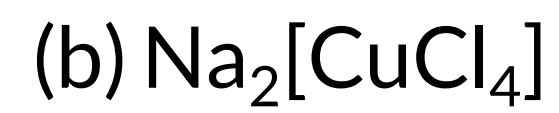
(c)  $[\text{Fe}(\text{H}_2\text{O})_2\text{Cl}_4]^{2-}$                       Diaquatetrachloroferrate(II)

(d)  $[\text{Zn}(\text{H}_2\text{O})(\text{OH})_3]^-$                       Aquatrihydroxozincate(II)

## PRACTICE PROBLEM 3

Name the following coordination compounds.

— *answer* —



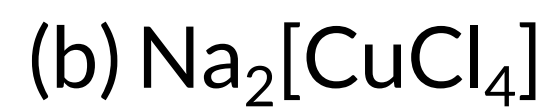
## PRACTICE PROBLEM 3

Name the following coordination compounds.

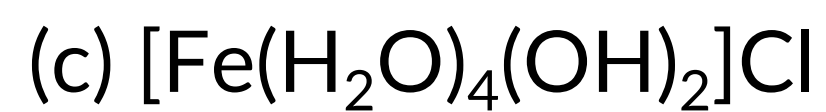
— *answer* —



Potassium Hexacyanoferrate(II)



Sodium Tetrachlorocuprate(II)



Tetraaquadihydroxoiron(III) Chloride



Hexaamminezinc(II) sulfate