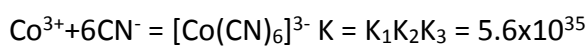
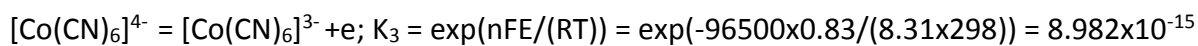
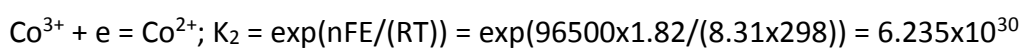
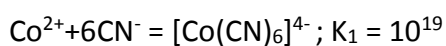


Answer on Question #55711 - Chemistry - Physical chemistry

Question:

The overall formation constant of following reaction is 1×10^{19} . $\text{Co}^{2+} + 6\text{CN}^- = [\text{Co}(\text{CN})_6]^{4-}$ for the reaction. Calculate the formation of following complex $\text{Co}^{3+} + 6\text{CN}^- = [\text{Co}(\text{CN})_6]^{3-}$ given that $[\text{Co}(\text{CN})_6]^{4-} = [\text{Co}(\text{CN})_6]^{3-} + e^-$, $E_0 = -0.83\text{V}$, $\text{Co}^{3+} + e^- = \text{Co}^{2+}$, $E_0 = 1.82\text{V}$

Solution



Answer: 5.6×10^{35}