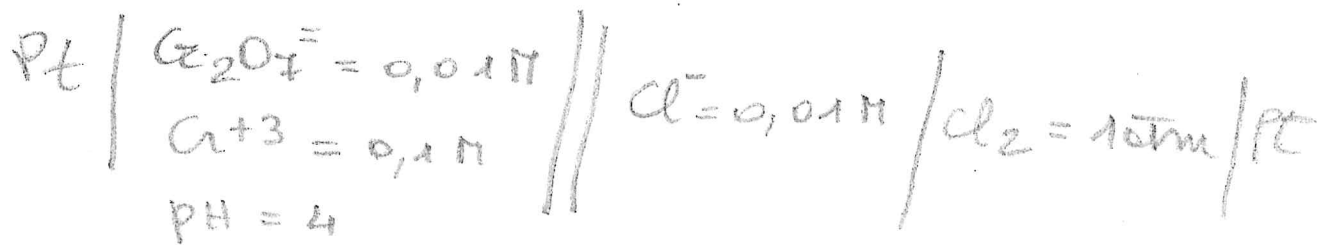
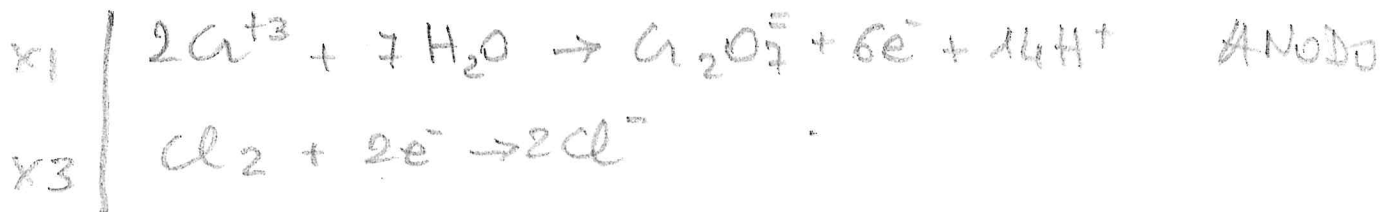


calcolare la fem della seguente pila:



SVOLGIMENTO:



$$f_{em} = (E^{\circ}_{\text{CAT}} - E^{\circ}_{\text{ANODO}}) + \frac{0,059}{6} \log \frac{[\text{Cr}_2\text{O}_7^{2-}] \cdot [\text{H}^+]^{14} \cdot [\text{Cl}^-]^6}{[\text{Cr}^{3+}]^2 \cdot [\text{Cl}_2]^3}$$

$$f_{em} = (1,36 - 1,33) + \frac{0,059}{6} \log \frac{0,01 \cdot (10^{-4})^{14} \cdot (0,01)^6}{(0,1)^2 \cdot (1)^3}$$

$$= 0,03 + 0,0098 \cdot \log 10^{-68}$$

$$= 0,03 + 0,0098 \cdot (-68) = 0,03 - 0,664 = -0,636 \text{ V}$$