



$$\alpha_4 = \frac{[Y^{4-}]}{C_{EDTA}} \Rightarrow [Y^{4-}] = \alpha_4 C_{EDTA}$$

$$C_{EDTA} = [H_4Y] + [H_3Y^-] + [H_2Y^{2-}] + [HY^{3-}] + [Y^{4-}]$$



$$K_{MY} = \frac{[MY^{(n-4)}]}{[M^{n+}][Y^{4-}]}$$

Ei sollen pH-st (pointing to the denominator)
solubel pH-st (pointing to the numerator)

$$K_{MY} = \frac{[MY^{(n-4)}]}{[M^{n+}] \alpha_4 C_{EDTA}}$$

$$K'_{MY} = \alpha_4 K_{MY} = \frac{[MY^{(n-4)}]}{[M^{n+}] \cdot C_{EDTA}}$$

solubel pH-st (pointing to the denominator)
Ei sollen pH-st (pointing to the numerator)