

Experiment 22 - for your pH of various substances
equations using look at p. 670

$$pH + pOH = 14$$

$$[H^+][OH^-] = 1.0 \times 10^{-14}$$

$$pH = -\log[H^+]$$

$$pOH = -\log[OH^-]$$

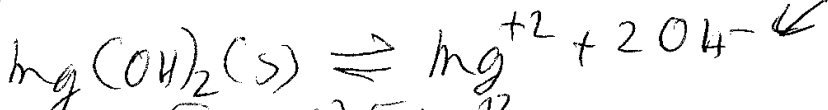
$$[H^+] = \text{antilog}(-pH)$$

$$[OH^-] = \text{antilog}(-pOH)$$

part 1

K_a values in text book (lecture - Tro)
p. 667 + p. 694

K_{sp} value in lecture text book
(p. A-13)



$$K_{sp} = [Mg^{+2}][OH^-]^2 \quad \text{can get from } \underline{pH}$$

$$[Mg^{+2}] = \frac{1}{2}[OH^-] \quad (\text{by stoichiometry})$$

part 2

your experiment uses $Ca(OH)_2$

Part 3 Titration strong acid + strong base should look like

