

1) Looking for pH of solution.

a. Acid

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

$[H^+] =$ Hydronium ion concentration
(units: M)

to do on calculator: 1) put in value of $[H^+]$

usually have to use $\boxed{EE}$ or $\boxed{EXP}$ button

2) hit $\boxed{\log}$ button

3) take negative of value

b. Base $pOH = -\log [OH^-]$

to do on calculator: do same as above

2) Looking for $[H^+]$ or $[OH^-]$ from pH of solution

a. Acid $[H^+] = 10^{-pH}$

b. Base $[OH^-] = 10^{-pOH}$

To do on calculator

1) put value of $-pH$

2) hit the $\boxed{10^x}$ button

3) there is your answer

3) Converting between pH & pOH and $[H^+]$ & $[OH^-]$

a. $pH + pOH = 14.00$

b. $[H^+] \cdot [OH^-] = 1.0 \times 10^{-14} M^2$