ACIDS and BASES

★Part 2: Practice Problems!★

Ex. The $[H^+]$ concentration of a solution is 5.0×10^{-2} M. What is the pH? What is the pOH. What is the $[OH^-]$ concentration?

[a.] $pH = -\log[H^+] = -\log[5.0 \times 10^{-2}] = 1.3$

$pH = 1.3$

[b.] $pH + pOH = 14$

$1.3 + pOH = 14$

$pOH = 12.7$

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

$[OH^-] = 10^{-pOH} = 10^{-12.7}$

$[OH^-] = 2.0 \times 10^{-13}$ M

Formulas:

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

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

$pH + pOH = 14$