pH AND pOH

Name: [illegible]

The pH of a solution indicates how acidic or basic that solution is.

pH range of 0 – 7 (acidic)
7 (neutral)
7-14 (basic)

Since pH + pOH = 14 at 25° C, if pH is known, the [OH⁻] can be calculated and vice versa.

pH = −log[H⁺] Ex: if [H⁺] = 10⁻⁴ M, pH = 4.
pOH = −log[OH⁻] Ex: if [OH⁻] = 10⁻⁹ M, pOH = 9.
Together, pH + pOH = 14.

Complete the following chart.

	[H⁺]	pH	[OH⁻]	pOH	Acidic or Basic
1.	10^{-7} M	6	10^{-7} M	8	Acidic
2.	10^{-5} M	5	10^{-9} M	9	[illegible]
3.	10^{-10} M	10	10^{-4} M	4	[illegible]
4.	10^{-8} M	8	10^{-6} M	6	[illegible]
5.	10^{-3} M	3	10^{-11} M	11	[illegible]
6.	10^{-12} M	12	10^{-2} M	2	[illegible]
7.	10^{-9} M	9	10^{-5} M	5	[illegible]
8.	10^{-1} M	1	10^{-13} M	13	[illegible]
9.	10^{-4} M	4	10^{-10} M	10	[illegible]
10.	10^{-2} M	2	10^{-12} M	12	[illegible]