Unit 13 Acid Bases Quiz 2A short

Name Key Period_____ (28 pts)

Calculate the H_3O+ concentration $[H_3O+]$ in each of the following solutions, and indicate whether the solution is acidic, basic, or neutral.

	$[H_3O^+]$	
1) $[OH^-] = 4.99 \times 10^{-2}$ M	2.00×10^{-13}	B
2) $[OH^-] = 9.91 \times 10^{-5}$ M	1.01×10^{-10}	B
3) $[OH^-] = 2.23 \times 10^{-12}$ M	4.48×10^{-3}	A
4) $[OH^-] = 9.110 \times 10^{-7}$ M	1.098×10^{-8}	B

Calculate the pH corresponding to each of the hydronium ion concentrations given below. Tell whether each solution is acidic, basic, or neutral.

1) $[H_3O^+] = .000100$ M	4.000	A
2) $[H_3O^+] = 8.19 \times 10^{-3}$ M	2.087	A
3) $[H_3O^+] = 9.18 \times 10^{-1}$ M	.037	A
4) $[H_3O^+] = 4.710 \times 10^{-7}$ M	6.3270	A

Calculate the pH corresponding to each of the hydroxide ion concentrations given below. Tell whether each solution is acidic, basic, or neutral.

1) $[OH^-] = 1.00 \times 10^{-7}$ M	7.000	N
2) $[OH^-] = 4.59 \times 10^{-13}$ M	1.662	A
3) $[OH^-] = 1.04 \times 10^{-4}$ M	10.017	B
4) $[OH^-] = 7.00 \times 10^{-1}$ M	13.845	B

Calculate the hydroxide ion concentration, in M, for the following pH values.

1) pH = 1.04 1.1×10^{-13}

2) pH = 13.1 1×10^{-1}

3) pH = 10.001 1.00×10^{-4}

4) pH = 7.0 1×10^{-7}