

Chem 1020 pH Calculations Worksheet

Fill in the empty blanks, and tell whether the solution will be acidic, basic, or neutral.

*Perform the starred problems *without* a calculator.

Fun fact: for a pH or pOH value, the only sig figs are the numbers to the right of the decimal point. So, pH = 4.73 has 2 sig figs. Why? The digits to the left of the decimal correspond with the power of 10, and thus have no uncertainty. All of the values in this table have 3 sig figs!

	$[\text{H}_3\text{O}^+]$	$[\text{OH}^-]$	pH	pOH	Acidic/Basic/Neutral
1.	2.35×10^{-3}				
2.		4.93×10^{-8}			
3.			8.320		
4.				10.270	
5.	3.72×10^{-10}				
6.		* 1.00×10^{-7}			
7.			2.580		
8.				5.260	
9.	* 1.00×10^{-3}				
10.		4.27×10^{-2}			
11.			*8.000		
12.				2.040	