

## pH Calculations

1. Complete the missing information in the table below:

$[\text{H}_3\text{O}^+]$	$[\text{OH}^-]$	pH	pOH	Acidic or Basic?
$1.0 \times 10^{-12} \text{ M}$				
		5.56		
	$1.0 \times 10^{-5}$			
			10.85	
		8.40		
	$6.8 \times 10^{-11}$			
$3.2 \times 10^{-3}$				
			4.68	

2. Use the information in the table above to complete the following sentences:

- As the  $[\text{H}_3\text{O}^+]$  of solution increases, the solution becomes more \_\_\_\_\_
- As the  $[\text{OH}^-]$  of solution increases, the solution becomes more \_\_\_\_\_
- As the pH of solution increases, the solution becomes more \_\_\_\_\_
- As the pOH of solution increases, the solution becomes more \_\_\_\_\_
- As the acidity of a solution increases, its pH \_\_\_\_\_
- As the basicity of a solution increases, its pH \_\_\_\_\_
- As the acidity of a solution increases, its pOH \_\_\_\_\_
- As the basicity of a solution increases, its pOH \_\_\_\_\_

[ANSWER KEY](#)