

FORMULAS FOR pH PROBLEMS

**Concentration
of strong acid**

|
| times number of H in acid formula
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**Concentration
of strong base**

|
times number of OH | in base formula
|
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$$[\text{H}^+] \longleftarrow [\text{H}^+][\text{OH}^-] = 10^{-14} \longrightarrow [\text{OH}^-]$$

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| $\text{pH} = -\log [\text{H}^+]$
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| $[\text{H}^+] = 10^{-\text{pH}}$
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| $\text{pOH} = -\log [\text{OH}^-]$
|
| $[\text{OH}^-] = 10^{-\text{pOH}}$
|
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$$\text{pH} \longleftarrow \text{pH} + \text{pOH} = 14 \longrightarrow \text{pOH}$$