Which of the following is the most acidic?

Solution A -- $[\text{OH}^-] = 1.3 \times 10^{-8}$ M
Solution B -- $[\text{OH}^-] = 8.3 \times 10^{-7}$ M
Solution C -- $[\text{OH}^-] = 4.2 \times 10^{-11}$ M

Which of the following is the most basic?

Solution A -- $[\text{OH}^-] = 1.3 \times 10^{-8}$ M
Solution B -- $[\text{OH}^-] = 8.3 \times 10^{-7}$ M
Solution C -- $[\text{OH}^-] = 4.2 \times 10^{-11}$ M

Which of the following would have the highest pH?

Solution A -- $[\text{H}_3\text{O}^+] = 7.0 \times 10^{-7}$ M
Solution B -- $[\text{H}_3\text{O}^+] = 8.8 \times 10^{-7}$ M
Solution C -- $[\text{H}_3\text{O}^+] = 4.2 \times 10^{-3}$ M

1.15
6.05
4.38

Which of the following should have the highest molarity of hydroxide?

Solution A -- pH=5.6
Solution B -- pH=11.2
Solution C -- pH=3.1

Which of the following is the most acidic?

Solution A -- $[\text{OH}^-] = 1.3 \times 10^{-8}$ M
Solution B -- $[\text{H}_3\text{O}^+] = 4.2 \times 10^{-5}$ M
Solution C -- pH=5.6

$\log (4.2 \times 10^{-5}) = 4.38$