

HONORS CHEMISTRY
HOMEWORK 11c.

Name: _____

Find the pH of each of the following solutions:

- | | |
|-----------------------------|-----------------|
| 1. 0.001 M HNO ₃ | 4. 0.1 M NaOH |
| 2. 0.000001 M HCl | 5. 0.0001 M KOH |
| 3. 0.1 M HClO ₃ | 6. 1.0 M HBr |

Use your calculator to find the pH of each of these solutions:

- | | |
|----------------------------|-----------------|
| 7. 0.45 M HCl | 9. 0.00036 NaOH |
| 8. 2.33 M HNO ₃ | 10. 2.1 M KOH |

Given the following conditions, find the [H⁺] or [H₃O⁺] concentration of each solution.

- | | | |
|---------------|---------------|---|
| 11. pH = 4.7 | 13. pH = 8.9 | 15. pOH = 8.3 |
| 12. pH = 3.84 | 14. pOH = 6.4 | 16. [OH ⁻] = 5.2 * 10 ⁻⁴ |

17. Find the pOH of a solution whose hydronium ion concentration is 7.72 * 10⁻⁸

18. Find the [OH⁻] concentration of a solution whose pH is 8.115