

pH Practice Worksheet

Name: _____

Period: _____

- 1) What is the pH of a solution that contains 25.0 grams of hydrochloric acid (HCl) dissolved in 1.50 solution?
- 2) What is the pH of a solution that contains 1.32 grams of nitric acid (HNO₃) dissolved in 750. mL solution?
- 3) What is the pH of a solution that contains 1.2 moles of nitric acid (HNO₃) and 1.7 moles of hydrochloric acid (HCl) dissolved in 1000. liters of solution?
- 4) If a solution has a [H⁺] concentration of 4.5×10^{-7} M, is this an acidic or basic solution? Explain.
- 5) An acidic solution has a pH of 4.00. If I dilute 10.0 mL of this solution to a final volume of 1000. mL, what is the pH of the resulting solution?
For Problems 6 – 9 calculate the pH
- 6) A 4.50×10^{-3} M HBr solution.
- 7) A 3.67×10^{-5} M KOH solution.
- 8) A solution made by diluting 25 mL of 6.0 M HCl until the final volume of the solution is 1.75 L.
- 9) 5.00 L of an aqueous solution that contains 1.00 grams of HBr and 1.00 grams of HNO₃.
- 10) What are the pOHs for the solutions in problems 6 through 9?
- 11) What is the pH of a 0.800 M aqueous solution of Ba(OH)₂