

## **pH Calculations**

adapted from <http://misterguch.brinkster.net/acidworksheets.html>

*Find the pH of the following acidic solutions: [show set up & steps for all problems]*

- 1) A 0.09 M solution of HBr (hydrobromic acid).
- 2) A  $2.234 \times 10^{-6}$  M solution of HI (hydroiodic acid).
- 3) 12 L of a solution containing 1 mole of hydrochloric acid.
- 4) 1098 L of a solution containing 8.543 moles of hydrobromic acid.
- 5) 120 mL of a solution containing 0.005 grams of hydrochloric acid.11)
- 6) 2.3 L of a solution containing 4.5 grams of nitric acid.
- 7) 100 mL of a solution containing 1.00 grams of nitric acid.
- 8) 1.5 L of a solution containing 5.6 grams of hydroiodic acid.
- 9) 8,000 L of a solution containing 6.7 grams of nitric acid and 4.5 grams of hydrochloric acid.
- 10) 50 L of a solution containing 0.09 grams of HCl, 0.9 grams of HBr, 9.0 grams of HI, and 90.0 grams of  $\text{HNO}_3$ .

Answer Omelet

3.64 2.11 1.51 1.08 0.80 5.65 1.53 1.05 1.54 1.52 3.00 4.06 3.87 1.10