

CHAPTER 17	pH Calculations	BLM 17.3.6
ASSESSMENT		

1. Complete the following table:

Substance	$[\text{H}_3\text{O}^+]$	pH	Acidic, Basic, or Neutral?
(a) household ammonia	1.25×10^{-12}		
(b) tomatoes		4.2	
(c)	4.0×10^8		basic
(d)	1.0×10^7	7	

2. For each of the substances (a) through (d) indicate if $[\text{H}_3\text{O}^+]$ or $[\text{OH}^-]$ is in greater concentration.

(a) _____

(b) _____

(c) _____

(d) _____

3. For each of the substances (a) through (d) indicate if it is a strong or weak acid or base or neutral.

(a) _____

(b) _____

(c) _____

(d) _____

4. (a) Suppose you were given 1 mol/L hydrochloric acid. Calculate its $[\text{H}_3\text{O}^+]$ and pH.

(b) What type of acid is it?