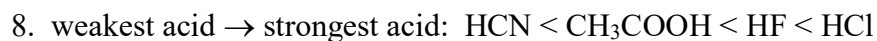
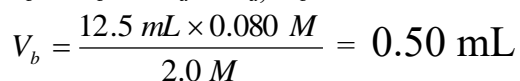
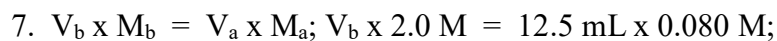
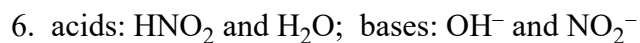
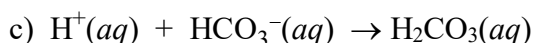
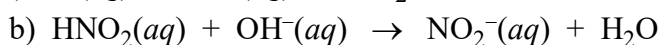
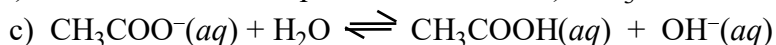
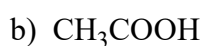
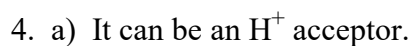
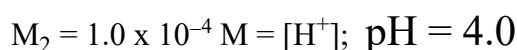
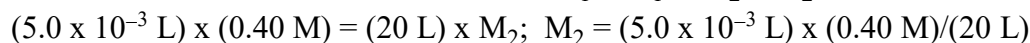
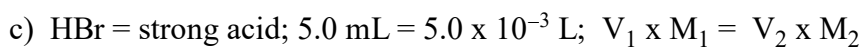
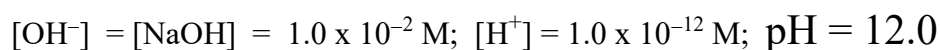
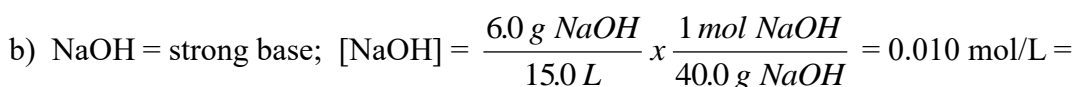
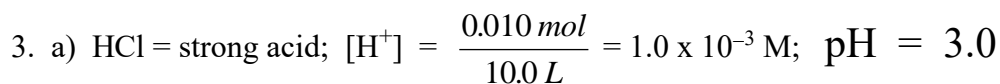
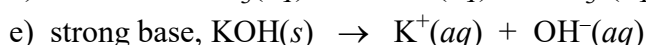
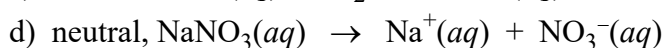
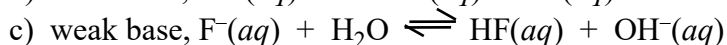
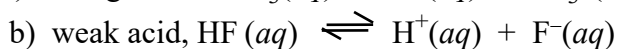
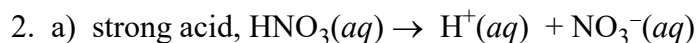


Answers to Chapter 16 Study Questions

1.

	[H ⁺]	[OH ⁻]	pH	acid, base or neutral?
a)	$1.0 \times 10^{-4} \text{ M}$	$1.0 \times 10^{-10} \text{ M}$	4.0	acid
b)	$1.0 \times 10^{-7} \text{ M}$	$1.0 \times 10^{-7} \text{ M}$	7.0	neutral
c)	$1.0 \times 10^{-12} \text{ M}$	$1.0 \times 10^{-2} \text{ M}$	12.0	base
d)	$1.0 \times 10^{-3} \text{ M}$	$1.0 \times 10^{-11} \text{ M}$	3.0	acid



9. a) NaHCO_3 used: $1.26 \text{ g NaHCO}_3 \times \frac{1 \text{ mol NaHCO}_3}{84.0 \text{ g NaHCO}_3} = 0.0150 \text{ moles}$

b) **0.0150 moles**

c) $26.1 \text{ mL} - 2.1 \text{ mL} = 24.0 \text{ mL} = 0.0240 \text{ L}$

d) $\text{molarity} = \frac{\text{moles}}{\text{liters}} = \frac{0.0150 \text{ mol}}{0.0240 \text{ L}} = 0.625 \text{ M}$