

Name: _____

Titration of An Antacid Report

Name of Antacid: _____

Tablets/Bottle: _____

Cost/Bottle: _____

Cost/Tablet: _____

Accurate Molarity for HCl solution _____ M, Accurate Molarity for NaOH solution _____ M

	Trial #1	Trial #2	Calc Checks	
Wt. of 250 mL flask (g)				
Wt. of flask + antacid (g)				
Wt. of Antacid (g)				
Initial Volume Reading HCl(mL)				
final Volume Reading HCl (mL)				
Initial Volume Reading NaOH(mL)				
final Volume Reading NaOH(mL)				

Calculations

	Trial #1	Trial #2	Calc Checks	
Total Moles of HCl used				
Total Moles of NaOH added				
Moles HCl neutralized by NaOH				
Moles HCl neutralized by Antacid				

Average Mass of Antacid Sample: _____ gram

Average Moles of HCl neutralized by Antacid : _____ mole

Questions:

I. Assuming that stomach acid is actually 0.170 M HCl, calculate:

1. Milliliters stomach acid neutralized by one antacid tablet: _____ mL

2. Milliliters stomach acid neutralized per gram antacid tablet: _____ mL

3. The cost of neutralizing 100 ml of stomach acid: \$ _____

Compare the values of various brands as directed by your instructor.