Quiz 14.6 – Strong Acid/Base Titrations

Name: _____

These questions concern titrating a solution of HCl with NaOH. $25.00\ ml$ of the HCl solution with unknown concentration are placed in an Erlenmeyer flask, and a burette is filled with a $0.125\ M$ solution of NaOH

Question 1

NaOH is added slowly while the pH is monitored. How will you know when the equivalence point of the titration has been reached?

Question 2

The equivalence point is reached after $34.65\ ml$ of the base have been added.
What was the initial acid concentration?

Question 3

Now that you know the initial concentration, calculate what the pH should have been before any base was added

Question 4

What will the pH be after you have added 34.40 and $34.90\ ml$ of the NaOH solution

Question 5

Sketch the titration curve, noting the pH at the most important points

Slaveships

By Lucille Clifton

loaded like spoons
into the belly of Jesus
where we lay for weeks for months
in the sweat and stink
of our own breathing
Jesus
why do you not protect us
chained to the heart of the Angel
where the prayers we never tell
and hot and red
as our bloody ankles
Jesus
Angel
can these be men
who vomit us out from ships
called Jesus Angel Grace of God
onto a heathen country
Jesus
Angel
ever again
can this tongue speak
can these bones walk
Grace Of God
can this sin live